



ECHO IRELAND

Journal of the
Irish Radio Transmitters Society

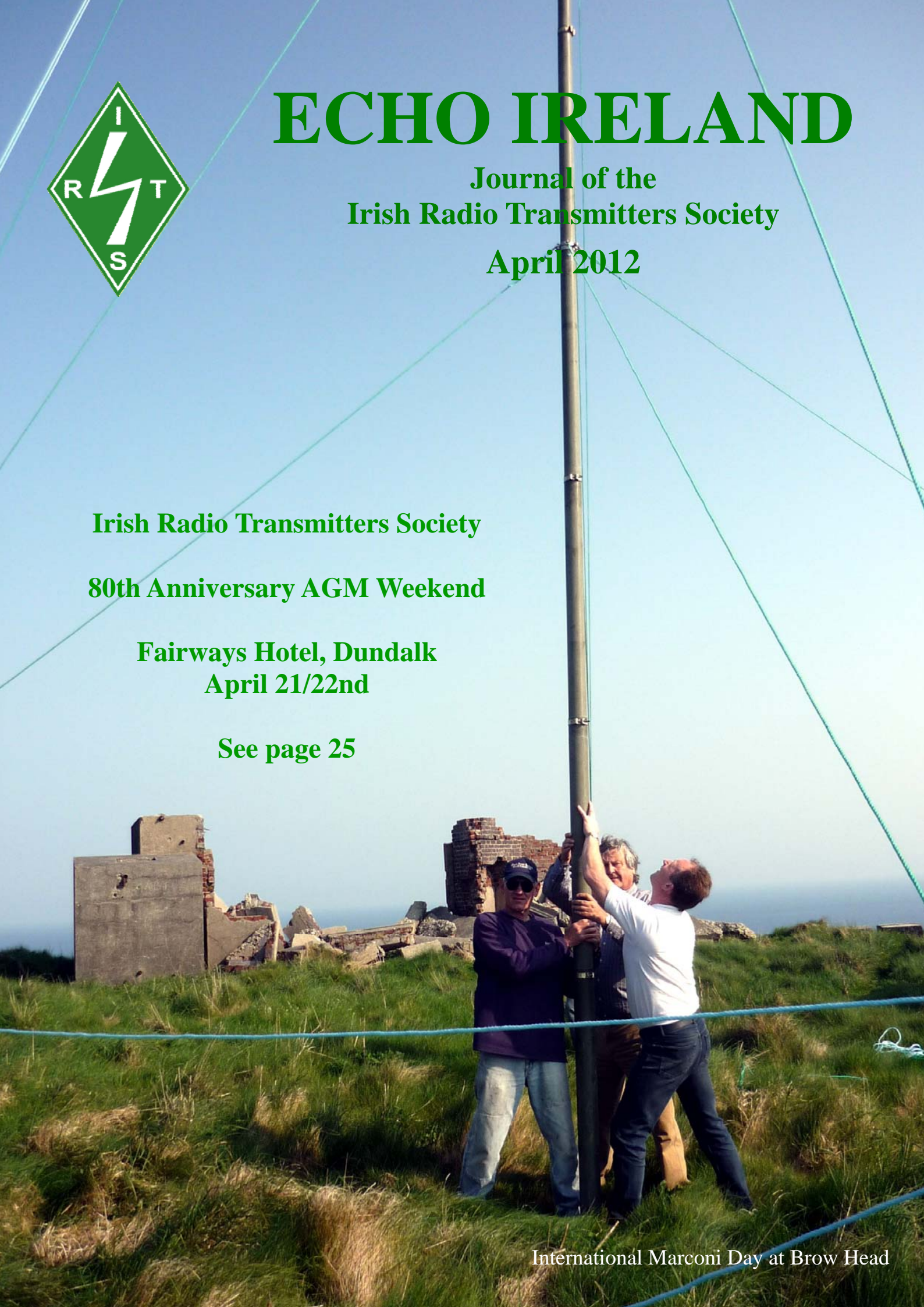
April 2012

Irish Radio Transmitters Society

80th Anniversary AGM Weekend

**Fairways Hotel, Dundalk
April 21/22nd**

See page 25



International Marconi Day at Brow Head

Society Officers 2011/2012

President:	Paul Martin EI2CA	087-2523908	<i>paul@comma.ie</i>
Vice President:	Seamus McCague EI8BP	01-2988045	<i>smccague@eircom.net</i>
Hon. Vice-Presidents:	Sean Nolan EI7CD	01-2851599	<i>ei7cd@gofree.indigo.ie</i>
	Dave Moore EI4BZ	087-6290574	<i>ei4bz@eircom.net</i>
Auditors:	Brendan De hÓra, EI3GV; Brendan Lynch, EI6GA		
Secretary:	Ger McNamara EI4GXB	087-2532512	<i>ei4gxb@gmail.com</i>
Treasurer:	Sean Donelan EI4GK	01-2821420	<i>donelansean@gmail.com</i>
P.R.O.:	Seamus McCague EI8BP	01-2988045	<i>smccague@eircom.net</i>
AREN Co-Ordinator:	John Ronan EI7IG	086 8167310	<i>ei7ig@aren.ie</i>
Awards Committee:	Peter Grant EI4HX (Chair)	087-7944779	<i>ei4hxpperimental@eircom.net</i>
	Pat Fitzpatrick EI2HX, Jim Holohan EI4HH.		
ComReg Liaison:	Sean Nolan EI7CD	01-2851599	<i>ei7cd@gofree.indigo.ie</i>
Contest Manager:	Thos Caffrey EI2JD	087-2953256	<i>thoscaffrey@hotmail.com</i>
EMC:	Brendan Minish EI6IZ	086-2501832	<i>ei6iz.Brendan@gmail.com</i>
Gaeilge:	Pádraig Ó Meachair EI7GK	0404-67658	<i>ei7gk@esatclear.ie</i>
External Awards/WEIC:	Sean Nolan, EI7CD	01-2851599	<i>ei7cd@gofree.indigo.ie</i>
IARU:	Sean Nolan, EI7CD	01-2851599	<i>ei7cd@gofree.indigo.ie</i>
IARUMS:	Ger McNamara EI4GXB	087-2532512	<i>ei4gxb@gmail.co</i>
IRTS Shop:	Peter Grant EI4HX	087-7944779	<i>ei4hxpperimental@eircom.net</i>
Licence Examination:	Sean Nolan EI7CD	01-2851599	<i>ei7cd@gofree.indigo.ie</i>
	(Sub-Committee Chairman)		
Membership Officer:	Joe Ryan EI7GY	01-2854250	<i>memrecords@irts.ie</i>
Morse Testing Co-Ord.:	Sean Donelan EI4GK	01-2821420	<i>donelansean@gmail.com</i>
Chief Morse Tester:	Dan Lloyd EI3AE	01-8382774	<i>daniellloyd@eircom.net.</i>
P.O. Box 462:	Michael McNamara EI2CL	01-8372493	<i>ei2clmike@eircom.net</i>
Publications Editor:	Dave Moore EI4BZ	087-6290574	<i>ei4bz@eircom.net</i>
Publications Distribution	Sean Donelan EI4GK	01-2821420	<i>donelansean@gmail.com</i>
Radio News Editor:	Aidan Noone	085-7100511	<i>newsteam@irts.ie</i>
Repeater Co-ordinator:	John McCarthy EI8JA	087-9437500	<i>ei8ja@eircom.net</i>
VHF Manager:	Trevor Dunne EI2GLB	087-2217829	<i>ei2glb@hotmail.com</i>
WAI Awards Manager:	Tom Rea EI2GP	093-35523	<i>tomrea@eircom.net</i>
WAI Book Sales:	Dave Moore EI4BZ	087-6290574	<i>ei4bz@eircom.net</i>
Website Editor:	Seamus McCague EI8BP	01-2988045	<i>smccague@eircom.net</i>
Website Designer::	Gerry Kavanagh EI8DRB	087-7996336	<i>pagemaster@irts.ie</i>

QSL Bureau

QSL Inwards Manager:	Pat Fitzpatrick EI2HX.	087-6300110	<i>patfitzpatrick@hotmail.com</i>
QSL Outwards Manager:	Tony Baldwin EI8JK		<i>ei8jk@amsat.org</i>
Incoming QSL Sub Managers:			
0/1/Calls & SWL:	John Browne EI7FAB.		
2 Series Calls:	Thos Caffrey EI2JD	087-2953256	<i>thoscaffrey@hotmail.com</i>
3 Series Calls:	Pat Fitzpatrick EI2HX.	087-6300110	<i>patfitzpatrick@hotmail.com</i>
4 Series Calls:	Jim Ryan EI3DP	021-4632365	<i>pamasada11@yahoo.ie</i>
5 Series Calls:	Terry Webb EI4GLB	087-6199943	<i>terencewebb@hotmail.com</i>
6 Series Calls:	Rory Hinchy EI4DJB		<i>rhinchy@iee.org</i>
7 Series Calls:	Roland Byrne EI4GYB		<i>rolandbyrne@ireland.com</i>
8 Series Calls:	Brian Canning EI8IU	086-2514822	<i>brianei8iu@eircom.net</i>
9 Series Calls:	Dave Deane EI9FBB	087-744777	<i>ei9fbb@gmail.com</i>

News Bulletins and Readers

Sunday				
Dublin	1100	7.055	SSB	Sean EI7CD, Roland EI4GYB, Ger EI4GXB
				Francis EI5GOB, George EI7GKB
Wicklow	1130	3.680	SSB	(as Gaeilge) Paddy EI7GK, Danny EI6GS
Dublin	1145	145.525	FM	Tony EI5EM, John EI7JG, Frank EI6EF, Liam EI3HK
Dublin	1200	3.650	SSB	As 1100
Mayo	2000	145.600 - 433.450 -		70.375 - 50.450
			FM	John EI7IQ, Padraic EI9JA, Jimmy EI2GCB
Tipperary	2030	145.450	FM	Tommy EI2IT, John EI2JB, Andy EI5JF, Eddie EI3FFB
Monday				
Cork	2000	145.750	FM	Vincent EI7HN
Limerick	2000	145.725	FM	Brian EI9AL, Simon EI7ALB, Gerry EI3JU, Ger EI4GXB
Louth	2000	145.675		Peter EI4HX, Thos EI2JD
Tuesday				
Waterford	2130	145.650	FM	Francis EI5GOB
North Cork	2000	430.925	FM	Lisa EI9GSB

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When is my membership due for renewal?

Your membership renewal date is shown on the wrapper in which the newsletter is posted – above the name and address. For those who receive Echo Ireland by electronic distribution, the renewal date is included in the email alert sent when a new issue is published. Members who pay by direct debit will see “(DD)” after the renewal date.

Use **www.irts.ie/renew** to renew your membership at any time; you can also renew at a Rally, or by sending your annual subscription directly to the IRTS Treasurer.

Please renew early to keep our postage and other costs down.

Membership is extended by 12 months from the normal renewal date whenever a payment is received.

Joe Ryan, Membership Records Officer
memrecords@irts.ie

IRTS Committee Meeting
Saturday May 19th
1100
Maldron Hotel,
Portlaoise

**Nominations for Awards
for IRTS Trophies.**

The time is here again for nominations for the several awards for IRTS Trophies that are required from within the membership.

This includes the awards for:

1. Service to the Society or to Amateur Radio. Awards in this category can be to members or non-members.
2. Awards for other achievements. Awards in this category include the 4 and 6 Meter Shields, the SWL Award, and the awards for Quality Construction Projects. These are confined to members only.

When considering your nominations, please refer to previous successful winners as included in

www.irts.ie/cgi/awards.cgi

Nominations may be from clubs or individuals, must be by post or e-mail, and can be forwarded to the awards committee members,

Pat EI2HX and Jim EI4HH,
or to Peter Grant EI4HX,
Chair of Awards Committee, QTHR, or
by e-mail to ei4hxpermental@eircom.net

**Online Access
to Echo Ireland**

If you would like to have online access to the complete library of Echo Ireland issues from 2001 onwards and receive new issues of Echo Ireland by way of electronic download instead of in hard copy, please advise the Membership Records Officer.

Include your call sign and email address in the request and send it to:
memrecords@irts.ie



Irish Radio Transmitters Society



Annual General Meeting

April 22nd 2012

**Fairways Hotel,
Dundalk, Co. Louth**

Members are hereby notified that the Annual General Meeting of the Irish Radio Transmitters Society will be held at 1400 on Sunday April 22nd at the Fairways Hotel, Dundalk, Co. Louth.

Committee Nominations

Rule 23.1 requires that the committee shall, at least 28 days prior to the Annual General Meeting, send to all paid up members a list showing the nominees for the offices of President and Vice-President and eleven committee positions.

The following are the Committee's nominations;

President	Seamus McCague EI8BP
Vice-President	Jim Smith EI4CP

Committee

John Owen-Jones EI1EM
Thos Caffrey EI2JD
Anthony Murphy EI2KC
Tony Casey EI3HA
Sean Donelan EI4GK
Ger McNamara EI4GXB
Stephen Wright EI5DD
Dave O'Connor EI6AL
Brendan Minish EI6IZ
John Ronan EI7IG
John McCarthy EI8JA

The names of other members eligible and willing to serve as President, Vice-President or as Committee members shall be added to the list upon receipt of nominations in writing, by any ten members in the case of a nominee for the Presidency or Vice-Presidency, or by any two members in the case of a nominee for any of the eleven committee positions. (Rule 23.2)



Billy MI6ETE



Hugh Bradley EI9GZB

EI80IRTS Award

The Irish Radio Transmitters Society was founded in 1932 and we are proud to celebrate our 80th anniversary in 2012. As part of the celebrations the Society will be using the special call-sign EI80IRTS.

A special certificate, available to all amateurs and SWLs, is being offered to celebrate this wonderful occasion. Contact the special callsign EI80IRTS during the period of January 1st 2012 to December 31st 2012.

Requirements

2-way communication on Phone, CW or Digi modes on the HF (1.8-28) and VHF (50-1200MHz) bands.

Cross band QSO's will not be accepted for this award.

Contacts made via active earthbound reflectors, repeaters and EchoLink will not be counted.

The certificate is available in three levels:

- Bronze Award 3 different bands.
- Silver Award 5 different bands.
- Gold Award 8 different bands.

Applicants

Applicants should submit a list showing the date and time you worked or heard EI80IRTS, plus frequency and mode. QSL cards are not required.

The declared QSO's will be cross-checked for validity based on the logs of EI80IRTS.

The application fee is €5.00 or US \$7.00

Send applications to Award Manager:

Thos Caffrey,
The Slip,
Clogherhead,
Co. Louth,
Ireland.

At the same time, please send an e-mail to contestmanager@irts.ie to inform him that you sent your application by mail.

The award is sponsored by the Dundalk Amateur Radio Society.

From the Editor.....

Welcome to another issue of Echo Ireland, slightly reduced in size due to the short deadline and the mailing of the new Call Book.

Two topics covered in the February issue caused more than usual reaction but unfortunately not many members were willing to go to print on the issues.


Paul EI5DI's letter on remote operation provoked strong opinions and a response from Dave EI6AL is carried in this issue.

The publication of a new EI DXCC participants league table generated quite a bit of feed back most of it supportive. However it was pointed out that high cost of participation in the DXCC Programme was causing some concern and that is an issue we will look at in detail in a future issue of Echo Ireland.


Thank for the comments.

73

Dave EI4BZ




Irish Radio Transmitters Society
Celebrating 80 Years + 1932-2012
Amateur Radio in Ireland





Call Book 2012



All members will have received the 2012 Call Book with this issue of Echo Ireland



Anthony EI2KC, Ark EI9KC, Don EI6IL with Jnr op and Thos EI2JD



Pictured during a recent visit to Dublin Khalid A4100 with IRTS Vice-President Séamus EI8BP and Mike EI3DY

Letters to the Editor.....

Remote Station Operation

I noted with interest the comments of Paul, EI5DI, in the February edition. Whilst I do not wish to prolong the debate within the pages of Echo Ireland, I suspect that some of the points he made are aimed at my article in the December issue and would therefore appreciate the opportunity to briefly answer them.

I cannot understand the thinking behind the proposition that remote station QSO's are not "real" QSO. Are they any more or less "real" than the burst of computer generated 599 that defines a DX QSO? I use the medium of amateur radio to converse with other amateurs. That, to me, is a QSO.

Paul states that "personal considerations such as no space for antenna have no bearing on this issue". I have been licensed for fifty years and enjoy the hobby. Recently I was faced with moving to a new QTH where there was no possibility whatever for any antenna. My only solution was remote operation which I adopted not, as Paul states, "to remove some RF in the signal path" but to remain on air. Is Paul suggesting I should have been forced to go QRT? As a fellow amateur I cannot believe that. I now enjoy (as distinct from "fondly imagining" enjoying) QSOs with other amateurs, person to person, and hope to do so for many more years.

I'll skip the somewhat bizarre comments comparing remote operation with the financial state of Europe and get to what I suspect is the real issue, and one that I touched on in the December article. Paul is an ardent contesteer and is very good at it. I suspect he sees remote operation as a potential threat to the current DX/contest scene and he is absolutely correct - but only if its use is abused.

Remote operation within a DX entity poses no threat to DX operation. When you contact a DX station you rarely ask his QTH, the prefix gives you all the information you need. If a station works me he has worked EI, whether I am remote or not is irrelevant, provided my remote station remains within the EI jurisdiction.

However, I see two genuine issues that need regulation. An operator identifying himself with his home call but operating a station outside his jurisdiction is one. This should not be permitted. In my view a station should always be approved by the country in which it is located and it should always identify itself using the callsign issued by that country. If that station is then accessed from outside the jurisdiction by a licenced operator, be it the local operator travelling abroad or another licenced amateur, and the correct station callsign is used, where is the problem? It still uses the call and remains a DX entity for the country in which it is located and licenced irrespective of whether the operator is in the shack, 10km away or 5000km away. How does that, in any way, "devalue" the DXCC award?

The second area of concern is the issue of WAI, WAS and other awards that rely on a precise location of the station. This could be resolved by the mandatory use of the suffix /R to all remote stations. This would advise callers looking for specific areas that they are not calling the home QTH and they either ignore the /R stations or ask for more detail. This works well for /M or /P, you know when you work them that the station is not at the home QTH.

So lets not get too worked up about remote operation. Amateur radio was born out of experimentation and innovation and remote technology is part of its development. It is a growing area and is no more of a threat to the "purity" of amateur radio than repeaters, packet radio, RTTY, Echolink etc - some of which combine other communications technology and all of which contribute to our overall knowledge and add to our enjoyment.

Dave EI6AL

AX.35 Packet and D-Star

The February edition of Echo Ireland contained a 4-page article entitled "AX.35 Packet and D-Star data links in Disruption Tolerant Networking, Part 1".

I have read the article carefully, twice, and I don't understand it. I don't know what it's doing in Echo Ireland, because any connection or reference to amateur radio is incidental, if not coincidental. This may be partly explained by the fact that two of its four authors are not radio amateurs.

It seems to me that articles intended for the benefit of IRTS members should be written in plain English, and that any necessary technical terms and concepts should be directly related to amateur radio and its practice.

Instead, we have been presented with an academic paper that very likely benefits no one but its authors. Please do not publish inappropriate articles in Echo Ireland.

I would prefer not to see Part 2 of this paper.

73,
Paul O'Kane EI5DI
1st March 2012



Congratulations to Dan EI3JZ

Congratulations to Dan EI3JZ who operated EI7M to a new European record in last years WPX SSB Contest on 40m.



Ivan EI1166



Raymond EI9DM



EI2HX, EI4GK, EI4HX

Limerick Radio Club.

The following officers were elected at the Limerick Radio Club AGM held on 8th February 2012:

Chairman: Simon Kenny EI7ALB
Hon Sec: Ger McNamara EI4GXB
Treasurer: Tony Condon EI2AW

Committee: Dermot Gleeson EI2GT
John Edgeworth EI6IW
Mike Griffin EI4FMB
Alan Cronin EI8EM

Trustees Michael Kingston EI2IX
Dermot Gleeson EI2GT
Tom O'Sullivan EI3AL

VHF/UHF Squares Table

VHF Manager, Trevor EI2GLB is aiming to get the 2011 Squares Table up to date and he is asking all EIs that have been active on the VHF and higher bands in 2011 to submit their totals to him.

Field Day Rule Changes

With immediate effect, the rules for both CW and SSB Fields have been amended.

The changes are highlighted on the contest rules section of the IRTS website - www.irts.ie.

The main changes are:

Scoring:

The DARC scoring system is now used for both field days.

Restricted Section:

Antenna eight increased to 15m
No cluster/skimmer allowed

Open Section:

Maximum power allowed 1500w

Band Plans:

Operation is to be in accordance with the IARU Region 1 band plan.

Comments to Contest Manager:-

Thos EI2JD
thoscaffrey@hotmail.com
087-2953256

GI HF Conference and DiGicon in 2012

West Tyrone Amateur Radio Club is planning another Conference to be held on Saturday 16th June, 2012.

A few speakers have already been secured for the Conference and we are currently working on the program for the day.

As there are still a few slots available, if you feel that you could enhance the program by giving a talk, demonstration or workshop, please contact Philip MIØMSO to express your interest.

Contact details are mi0mso@yahoo.co.uk or 077 9338 6795

Galway Radio Experimenters Club

Galway Radio Experimenters Club had two very interesting presentations at their club meeting on Monday 12th March at The Anno Santo Hotel, Threadneedle Road, Galway.

Larry, EI9CN, demonstrated the software defined radio, the Flex 5000A and Tom EI3ER gave a short talk on the radio communications surrounding the sinking of the Titanic, the ship's radio station, the ships that worked the Titanic and the radio officers involved.

At the February meeting, Enda EI2II gave a great demonstration on the advantages of computerising the ham shack, from getting the most from your logging software to propagation prediction and DXClusters.

www.galwayradio.com

The Dublin ATV Repeater

Daniel Cussen EI9FHB (dan@post.com)

Tom McGrath EI7HT (mcgrath_ie@yahoo.com)

How we got here

Amateur Television (ATV) is an aspect of the amateur radio hobby that has interested us for many years. Nowadays, most ATV activity is on the microwave bands, so simplex contacts are generally confined to line-of-sight paths. A well-located repeater can make all the difference: we could see that the ATV repeater run by Ronnie EI9ED in Kells had encouraged the growth of ATV experimenting in the North East of the country. We decided that Dublin needed an ATV repeater and, fortunately for us, South Dublin Radio Club adopted this project.

After more than a year's planning and preparation, and having obtained the necessary licence and site permissions, we installed the Dublin ATV repeater on Three Rock Mountain during January and February. The repeater was officially launched by South Dublin Radio Club (which owns and manages the repeater) at the recent rally in Coolmine. The call signs allocated for the new repeater are EI3TRT (TX on 13cms) and EI9TRV (TX on 3cms).

The techie details

The repeater input frequency is 1249Mhz, i.e. in the 23cms band. The output frequency at present is 2390MHz (13cms band), but we also have a licence to TX on 10.060Ghz (3cms band). The output includes stereo sound, which will allow one sound channel to be used for talkback. The control frequency (for

turning on/off, switching cameras etc.) is 144.700MHz. To save power, the repeater switches off after use and therefore needs to be switched on remotely before use. Contact the authors for more information on this.

As of now (March 2012) we are just transmitting the test card and we are concentrating on setting people up to receive. We aim to have the repeater fully operational by the Summer.

Given the location of the repeater, reception is strongest in South Dublin. However, through a link to the Cavan repeater, coverage is extended to other areas.



Reception testing

Although we have produced coverage maps for the repeater, 'the proof of the pudding is in the eating'. A very simple setup will demonstrate if reception is possible and the best antenna position at the QTH. We have put together a number of ATV reception kits, consisting of an antenna, receiver, a portable TV and the necessary leads. These kits can



The operation of the ATV repeater is demonstrated at the club's Tuesday meetings: Dan EI9FHB and Tom EI7HT (right of photo) with club members at the first demonstration.

be borrowed from the club (a deposit is required) to allow potential users to check the signal at their QTH before buying anything.

A complete kit (not including a TV) is available from the club for 99 euros – this figure includes the equipment at cost and a 30 euros contribution to the running of the system. The panel below shows the contents of the kit. If the antenna shown does not give enough gain, an alternative mesh dish (ex-MMDS) is available.

We are keen for as many as possible to test their ability to receive the new repeater: please come along to one of our club meetings to see the repeater in action.

Weekly meeting location:

www.southdublinradioclub.ie

Coverage maps for Dublin and Cavan systems: www.iatc.ie

ATV Reception Kit



14dBi Panel antenna



SMA to N adapter



13cms Receiver



RCA lead to TV



HF Happenings

with Anthony Murphy EI2KC

Hello again folks and welcome to the latest instalment of HF Happenings.

It hasn't been too long since the last issue of Echo Ireland dropped in through the letterbox, and in that time the bands haven't been in their best shape.

However, that hasn't prevented some of you from working some extremely good DX, and as all good DXers will know, tenacity wins the day. Sometimes, you have to work hard for that new country or band slot, and on occasion band conditions can deteriorate very quickly.

There is not much to say about propagation, except that it has been relatively poor on the upper bands, and we have not yet seen an uplift or a return to anything like the fantastic conditions we had in the latter part of 2011.

There are some good days on 12m and 10m, but generally they are quieter than before.

I have had some confirmation from top band operators that 160m was pretty dismal throughout the winter, and as summer fast approaches we can expect to be saying very little about either that band or 80 metres over the coming months.

Some of you will know that I am currently working on a new book, tentatively called 'Newgrange – Monument to Immortality', to be published by The Liffey Press in the autumn. That project is starting to keep me very busy in my spare time, so I have a lot less time for radio activity at the moment. So, rather than looking through my own log for the slim pickings of late, I decided to throw the forum of HF Happenings open to some other HF operators out there in Ireland who have been perhaps a bit more active than I have been lately. I asked for contributions from various DXers and was delighted to get a number of responses.

Band Reports

Trevor EI2GLB reports that he has found the higher bands to be poor since the burst of solar activity late last year.

"**10m** has been very bad with only short openings from time to time."

"**12m** has not been too bad with some nice DX possible. Highlights here for me have been 3B9, 3C6, 3DA, HK0, VP6T and VP8S.

15m has been very good. I worked 500 stations in the recent CQ WPX RTTY contest here and was by far the best band over that weekend, some DX highlights have been again 3C, 3DA, HK0M, KG4, 6O and VP6T.

20m is not a band I am overly fond of as it's full of lids but I have spent some time on it and some of the more interesting ones I have are 4U, H40, HK0, KL7, KP2, P29 and VP6T.

30m this is a new band for me and almost everything I work on it is a new one. I have a poor slopping doublet here so it's hard work but have made it with HK0, VP6T, PJ7 and lots of other stations from the Caribbean.

40m – again, this is a band I have never spent much time on but to increase my overall DXCC score I have spent some more time here. I have the usual HK0, VP6T but the rest have

mainly been closer EU stations that I had never worked on 40 before.

On **80m** my antenna is not a great DX performer here so apart from HK0NA and VP6T I have only EU stations in the log."

"The recent HK0NA operation on Malpelo Island was very well run, and I was over the moon to get 23 band slots with them. Another operation that I think was excellent was the VP6T to Pitcairn Island I only managed 9 slots with the but this was a lot smaller op than HK0NA was. I am lucky that I have a good amount of free time to chase the DX but coming into the summer that time will disappear."

John EI7BA says he's been concentrating mainly on the low bands in recent months, as there were a few "new ones" around. "I collared 3C0E, and ZD7XF on **160**, so I'm happy with that. 9N7BM has eluded me so far. 5N7M has been on 160 a lot, and our own Dave A92IO has been putting in a great signal to EI.

40m has been interesting, with lots of Caribbean stations.. V3, V2, 9Y, 6Y, HR, PJ7 etc. Overall, there's been plenty to keep us off the streets, and out of the pub."

"You mentioned Antennas and Digimodes. I'm a reluctant digimode user, as I find CW much easier and faster, but . . . if the DX is on digimodes, I'll work digimodes. {;o) I've been having fun comparing my homebrew G3TXQ Hexbeam, against my 2 el Quad, and I've concluded that the HEX is the best small antenna around. They really are very little compromised. The quad beats it by a surprisingly small margin. They can be easily homebrewed, and have an equivalent performance to something like the Optibeam OBW 10-5, which is a fine antenna, but costs circa 1,500 quid."

Paddy EI1DG says he is active on all bands in HF, but really never got into VHF as "it was mainly my job to look after HF in the Army and Air Corps".

However, he adds: "Today I put up a six metre three element Yagi with the intentions of doing some activity on that band. I mainly use digital modes, RTTY and JT65 being my favourite modes. I started using JT65 on Dec 12 last year (2011) and found it a fascinating mode, being able to copy a signal you can't hear intrigued me!! So I started working US stations a lot and then decided to give WAS a go.

So it took just 12 months to get all 50 states confirmed, both on LOTW and E-qs! !!

Not a lover of LOTW and E-qs! as I prefer the paper QSL but do use them. I have been trying to get six states on CW to complete WAS for the past 20 years or so!

I am now concentrating on all bands WAS using JT65 as it nearly guarantees a contact with the use of very little power and you can check who and where is receiving your signal with PSK reporter.

My garden is small so I use an MA5B mini beam and a vertical HF-9V. Between these two antennas I do ok. The rig is an Icom IC-706 and I use 20w on JT65, 50w on RTTY/CW."

Paddy adds that he is glad to see the DXCC standings in Echo Ireland: "A great idea to show the DXCC standings in the IRTS newsletter as it gives you a little bit of encouragement to

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(Continued from page 8)

give it a lash!! I am retired so have a little more time then ever.

I have gained DXCC in RTTY and CW and not far with JT65."

Congratulations Paddy, and it's great to hear someone enjoying the hobby with limited space and modest antennas.

Southern Sudan

Anyone who worked ST0R, the Dxpedition to Southern Sudan, a few months back, will be interested to hear that the ITU has assigned the prefix Z8 to Southern Sudan. The new prefixes will run from Z8A to Z8Z. So the ST0R card will be a nice rare one to have for your collection!

Recent DXpeditions:

6O3A – Somalia

I've heard this one described as a "not in my lifetime" activation. Somalia, as some of you might know, is a country devastated by poverty and ravaged by war. It is a country run by pirates where very few people have electricity or running water, and where, in some parts, sewage flows through the streets. Not many of us would have expected the opportunity to work this very rare one, but Darko J28AA was not deterred by conditions there and activated 6O for the world's ham community during February.

Unfortunately for phone fans, this was a CW only operation. Congratulations to the 10 lucky EIs who made it into the log. Top of the pile with an incredible six QSOs was Doug EI2CN, followed by Ark EI9KC and Don EI6IL on four apiece, some whippersnapper who signs his call as EI2KC with two QSOs, and one apiece for Trevor EI2GLB, Eoin EI9O, Thos EI2JD, EI2KE, EI0W and Brendan EI0CZ. Heartiest congratulations to all.

VK0TH – Macquarie Island

Any of you EIs lucky enough to bag VK0TH will be thrilled to hear that it has now been accepted for DXCC credit.

Dxcoffee.com provides this update:

"Bill Moore, NC1L, ARRL Awards Branch Manager, has recently announced the approval of VK0TH's activity from Macquarie Island for DXCC credit. If you had this DXCC entity rejected in a recent application, drop a note to bmoore@arrl.org to have your record updated.

Note: due to extremely heavy e-mail DXCC may not respond immediately to your message. Once updated, this will be reflected in your LoTW account and/or in the live, daily DXCC standings on the website. www.arrl.org/dxcc."

3C6A – Equatorial Guinea

On their way to activate Annobon Island, operators Elmo EA5BYP and Javier EA5KM stopped off at Pagalu in Equatorial Guinea and gave us the chance to get that entity into the log under the callsign 3C6A. They were delayed a bit leaving for Annobon, giving us a longer window of opportunity to get them into the log. I worked them just the once, on 17m CW, but was delighted to do so.

Unfortunately there is no online log as I write this so I cannot tell how many EI stations worked them.

3C0E – Annobon Island

Annobon, in the Atlantic off the west coast of Africa, is the 32nd most wanted DXCC according to DX magazine. So when



Darko (J28AA) with the Somali Minister and Director of Communications at the end of his activation of Somalia as 6O3A. He made 8,657 QSOs, mostly on CW.

they finally started operations there on March 4th the pile-ups were considerable. Because there were only two operators, things were a bit frantic. There was lots of frustration too as they would suddenly call for US only while propagation was good to EU.

This frustration was expressed in the most ugly and unseemly fashion on the DX clusters, where the two EA ops were subjected to the most horrendous abuse, some of it personal. This is one unfortunate aspect of the modern hobby, and seems to be getting worse with time.

Some of the cowards who post disparaging remarks hide behind veiled identities – often spotting the DX under its own callsign, or under something like EU0DX or EU0SWL.

I shouldn't even mention all this, except that it has been bothering me. A lot of these cowards who post anonymously do not understand the pressures and strains of running a small two-man DXpedition.

After all, Elmo and Javier have gone there at their own expense, and have given of their own free time, to allow us the opportunity to work a rare one.

The frustration of not getting into the log sometimes expresses itself in the most disconcerting fashion.

Intentional QRM is also becoming a problem. Someone with a grudge – probably not being able to get into the log – starts tuning constantly on the DX frequency, or perhaps sending a long series of Morse dots with amplification, drowning out the weaker DX station.

Others send their own messages causing QRM. On one occasion on 30 metres I could hear two different 3C0E's calling CQ, although one was much stronger and obviously a pirate. And then there's the so-called "frequency police" who, in

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some cases, are the worst instigators of QRM of all.

On one or two occasions I have accidentally called a DX station on the simplex frequency, innocently not realising I had forgot to hit the “split” button on my rig. It happens to the best of us from time to time. On one occasion I got a flurry of abuse including the following from one clearly upset policeman: “QSY UP IDIOT UP”.

Now who is the bigger idiot? Me, for accidentally sending EI2KC on the DX frequency, or him, for sending twelve Morse characters, also on the DX frequency?

Rhetorical question.

As I write this, I have not yet made it into the 3C0E log, but plenty of EI stations have. Again there is no online log at this time, so I might provide a further update in the next issue.

PJ7PT – St Maarten

During March a Polish team activated this Caribbean entity, which filled out a few band slots for various EI operators. As I write this top of the pile is Ark EI9KC with 8 QSOs, followed by Don EI6IL on 7 and Trevor EI2GLB on 6, with a total of 16 Irish ops in the log. Well done all.

VP2-M Montserrat

Norbert, DL2RNS;, Olaf, DL7JOM and Olaf, DM2XO operated from the island of Montserrat (IOTA NA-103) from the 27th of February to the 10th of March with calls: VP2MSN, VP2MOM and VP2MXO.

They operated on the HF bands. Lots of EIs made it into the logs and filled out some band slots.

A35YZ – Tonga

As I write this the A35YZ DXpedition to Tonga has just begun. I will provide an update in the next issue.

First indications are that the signals are very weak into EI, so good luck everyone!

Forthcoming DXpeditions:

V5 – Namibia

David, Gilli, Richard and Kalle fly out to Cape Town arriving on 14th March. They will drive up to Oranjemund on 18th and begin operating on 19th.

Their callsigns are now confirmed as V5/GI4FUM, V5/GI8MIV, V5/GI4DOH and V5/DM3BJ.

They will be operating from the QTH of Andre V51B.

Andre has received a new ring gear for his rotator and is building a new 2 element Quad which will be QRV by the time the team arrive.

Richard GI4DOH plans to operate on CW and David GI4FUM and Kalle DM3BJ will concentrate on RTTY and PSK31.

David and Gillian will also be on SSB. The team will be QRV for CQWW WPX SSB on 24th/25th March with the callsign V55B.

All QSLs for the operation should go via David GI4FUM who is QTHR.

VK8 – Bremer Island

Craig VK8AS reports: “I’m pleased to announce that my next IOTA DXpedition will be to Bremer Island OC-185 on April 18 to 23 2012 using the callsign VK8BI. I will be running 400W into a Spiderbeam Yagi for 10-12-15-17-20 on a 10m

Spiderbeam.

Operation will be SSB only (although I will have the capability of running PSK31/RTTY at rare moments).

OC-185 was last activated in 2004 for two days and prior to that in 1999 and is only claimed by 20% of IOTA program participants.

A strong focus will be on North America and Europe.

Full operation details are available at QRX.com which gives details of the blog site that outlines best operating times to different regions of the world.”

TZ5T – Mali (postponed)

The planned DXpedition to Mali by an Italian team has, regrettably, been postponed until a date unknown.

On their official website, the team said, “We regret having to give bad news about the planned DXpedition. The situation of civil war in Mali between the government and Tuareg is getting worse lately and, for safety reasons, the authorities do not issue licenses to radio amateurs who may be targeted because of radio equipment.

For this reason the DXpedition is postponed until a later date.” The expedition had been planned for April.

KH8/5W/3D2R – American Samoa, Samoa, Rotuma

Hrane, YT1AD will be travelling to the Central Pacific in April to prepare for the upcoming DXpedition in September to Conway Reef.

He will be active for a few days from the following locations:

- **KH8/N9YU** from **American Samoa** April 7-9, from QTH of AH8LG (Pago Pago)

- **5W7A** from Apia, **Samoa** April 9-11

3D2R from **Rotuma Island** April 13-20, where he will visit the Ministry of Telecommunications and Tourism with Tevita Rokobaro, 3D2TR, then bring the equipment donated to the 3D2RI Radio Club for the students of Rotuma High School.

KH8-S Swains Island

Joe, W8GEX has announced his latest DXpedition plans:

“Joe, W8GEX and Craig, K9CT are pleased to announce they are planning another DXpedition to a rare DX entity. Joe and Craig were co-leaders of the very successful PJ7E DXpedition on 10-10-10. Before that, they were part of the team that re-activated Midway, K4M in 2009.

This DXpedition will be to Swains Island in September, 2012. Swains ranks number 31 on DX Magazine’s Most Wanted Survey and number 30 on Club Log’s Most Wanted List.

Because of the anticipated demand, a highly experienced team of 20 operators has been formed. The team will operate six stations over a 14 day period, from 160 to 6 meters on all modes, using the callsign NH8S.

Great emphasis will be placed on Europe where the DX entity is most needed.

Team members include AA4NN, DJ7JC, DL3DXX, I8NHJ, K5AB, K6MM, K6TD, K9CT, KH7Y, N2TU, N6HC, NA6M, ND2T, NI6T, SM5AQD, W4BUW, W6KK, W8GEX, WB4JTT, and WB9Z.

Swains is a privately owned island and the only way to get there is from American Samoa via ship. The time frame for this operation may not be the best for the low bands, but dates are dictated by transportation and weather.

The team of international operators will first gather in Honolulu and then travel to American Samoa together.

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Landing permission has been granted for tent and generator operations by the owner for this timeframe.

The website, (<http://www.nh8s.org/>) developed by team member John, K6MM, who will provide updates as they become available. There are no communication systems on Swains, but logs will be uploaded daily via satellite phone.

Later, the group will also have an QSL link on the website for easy QSLing.

All equipment must be sent from the US via cargo ship in June. Location, transportation, island costs, and other logistics make this a costly trip. Therefore, donations are very much appreciated. Details of how to donate to help defray expenses are on the website.

Thanks to ICOM, who will be supplying IC-7600s for use. Joe, AA4NN, will be QSL manager, and Carl, N4AA of DX Magazine will sponsor the log search.

CY9 – St. Paul Island

St Paul Island is called the Graveyard of the Gulf and that is where an international team of DXers will be heading to later this year.

Plans are well under way for a 10-man team to activate this now wanted DXCC entity, which was last on air in 2005, with the callsign CY9M.

When you consider most needed entities (perhaps out with the Top 10) are activated every five years or so, it is now time to mount a serious effort from CY9.

Most operators will be unaware that in 2010, St Paul Island became the highest mover on DX Magazines most wanted list; from #77 to #47.

Today, according to that list and ClubLog, CY9 is more needed than entities such as Tokelau (ZK3) or PY0T (Trindade & Martim Vaz).

The team consists of Mike AB5EB, Oscar EA1DR, George EA2TA, Christian EA3NT, Simon IZ7ATN, Col MM0NDX, Bjorn SM0MDG, Vicky SV2KBS, Steve VA3FM and Kevin VE3EN.

From late July to early August, IOTA contest included, the group will be active all bands, modes (160-2m) with special attention on 6m and 160m if propagation allows.

For more information see the official DXpedition web-site at <http://www.cy9m.com>

E5 – South Cook Islands

Operators Graeme/VK4FI and Alan/VK4WR will be active as E51GMH and E51BKM, respectively, from the South Cook Islands between April 8-27th.

Graeme informs OPDX that they will activate Rarotonga Island (OC-013) and Aitutaki Island (OC-083).

Their main band of interest is 6 meters, and for the HF bands, 40/20/17/15/12/10 meters. They will use and IC-706 and a FT-450 into a 5 element Yagi for 6m and a OCF Dipole.

Modes will be CW and SSB only, no amplifiers - 100 watts only. QSLs go to VK4FI (see (QRZ.com) info - 2 USDs for postage).

8Y – Guyana

Operators Anderson/PY2TNT and Alex/PY2WAS will be active as 8R1PY from Lethem, Guyana, between April 5-8th. Activity will be on 80-10 meters, including 30/17/12 meters, using CW and SSB. QSL via PY2WAS, direct or by the Bureau.

FR – Reunion

Michael DF8AN plans activity from Reunion as FR/DF8AN island between September 2-10, 2012. QRV mostly on CW.

As usual, thanks to OPDX, www.dx-world.net and www.dxcffee.com for information on DXpeditions.

That's all for now folks. Remember to keep a close ear on the bands and watch for possible openings on the high bands.

As usual I'd be very happy to hear about your activities by email on hamradioireland@gmail.com

In the meantime, I hope to hear you QRV on St. Patrick's Day for CQIR.

73 for now.

Slán go fóill

EI2KC

Benneshill March 18th-26th 2012



Oliver ON4EI will again be QRV from Ireland near Fethard (IO62EL) on top of Benneshill (170m ASL) with his Irish call-sign EI8GQB.

He will enter the CQ WPX SSB Contest as SOAB Low Power Non Assisted (March 24-25).

(Oliver set a new EI Low Power All Band record in this contest in 2011)

During the week before the contest Oliver will set up 5 antennas to support SO2R operation.

Reference frequency is 7.100 MHz +/- QRM.

Equipment:

- 18m top loaded vertical monopole for 160-80m bands + 32 radials.
- 2 Spiderbeam antennas for 20/15/10m bands.
- 200m long beverage East-West.
- 3 elements East-West bi-directional inverted V beam for 40m band.
- Rigs are Elecraft K3 & Kenwood TS2000.

Olivier will hold a daily blog on www.qrz.com/db/EI8GQB and post regularly video on YouTube ON4EI's channel <http://www.youtube.com/user/ON4EI>

If you want to visit him during the week, please send a mail to ON4EI@VANDENBALCK.EU

AX.25 Packet and D-Star data links in Disruption Tolerant Networking Part 2

John Ronan, EI7IG: Darren Long, G0HWW: Kristian Walsh: Cathal O'Connor

Continued from February issue.....

D-Star experiments

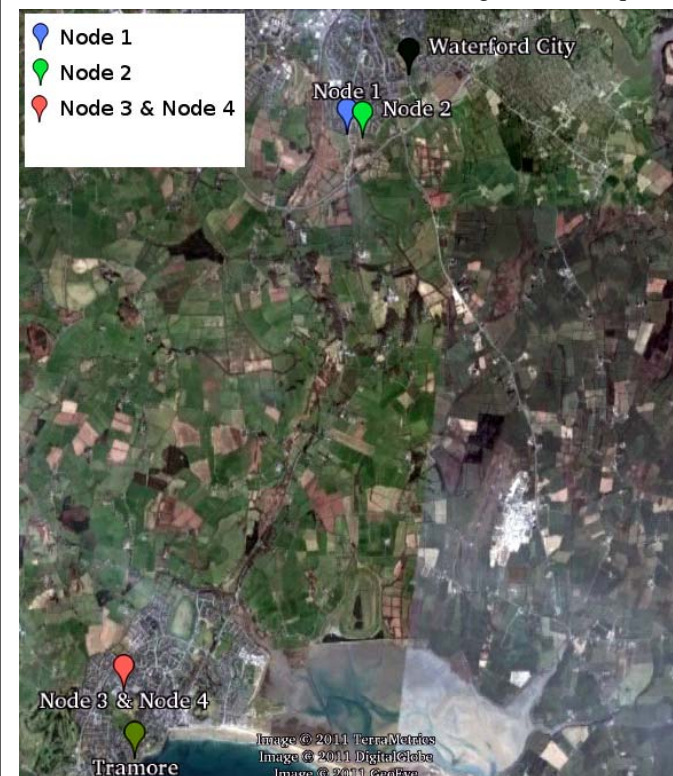
In reality, this was effectively just a “Drag Race” between different protocols. Which would give better throughput given the nature of the network. We did some initial “control” testing in the lab between two nodes in “ideal” conditions.

For this point-to-point test, no discovery or routing mechanisms were needed. Then we moved the equipment to three separate locations.

Each node in the network consisted of an Icom ID-1 transceiver and a Linux PC. In our testing, both the DTN reference implementations TCP Convergence Layer (TCP-CL) and the NORM Convergence Layer (NORM-CL) were used to investigate DTN performance. NORM was chosen for examination as previous research suggested that NORM would be suited for use in networks that are bandwidth constrained, or networks that suffer from high levels of packet loss. The Iperf [13] and Wget [14] tools were used to test “plain” TCP. While Iperf is more of a “network test tool”. Wget is effectively, just a http client and it attempts to pull down a file from a web server.

Iperf is a network test tool developed by National Laboratory for Applied Networking Research/Distributed applications Support Team (NLNR/DAST) as a tool for measuring maximum TCP and UDP bandwidth performance.

Wget is a free software package for retrieving files using HTTP, HTTPS and FTP, the most widely-used Internet protocols. It is a non-interactive command line tool, so it is easily called from scripts. It sends one, short, HTTP request over TCP to a remote server, then receives a much longer HTTP request



from that server. There is potential for delay between the server receiving the request and replying, but the type of request used here (“send me this file”), and the low load on the server minimise these.

The map shows the area where the experiments were conducted and the location of the nodes.

Several separate network configurations were examined:

- * Control - This entailed placing two radios in close proximity on the bench using dummy loads for aeriels.

- Point-to-Point - This was a 220m link (approx.), from Node 1 to Node 2.

- Single Hop - This included the link between Node1 and Node 2 and added a 8.5km hop (approx.), from Node 2 to Node 3.

- Double Hop - This included both links above with a short hop from Node 3 to Node 4.

- Single Hop with interfering node - This final test was simply where Node 2 was transferring data to Node 3. Every 2 minutes, Node 3 would also receive data from Node 4. Node 4 could not be heard by Node 2 and thus was effectively causing deliberate interference to Node 2 (See figure 6 below).

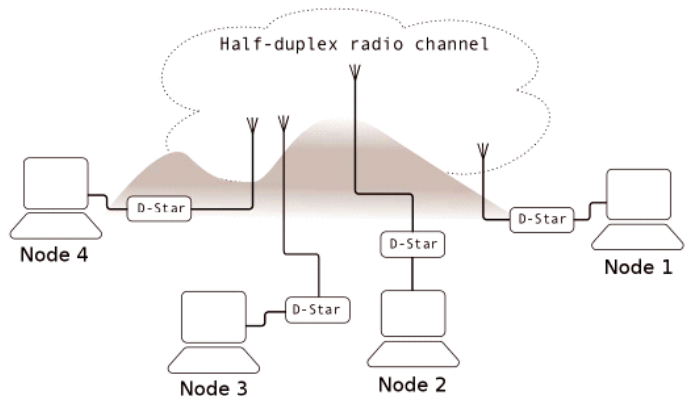


Fig. 6 - Experimental Network

For the tests involving just TCP/IP all routing was configured manually. For the DTN convergence layers, the discovery mechanisms were not used, however dtlsr, the DTN routing mechanism, was configured with defaults which meant that each node broadcast a route “announcement” once per hour.

As per the figure above, the testbed was configured with Linux nodes and Icom ID-1 transceivers at 3 separate locations.

- * Location 1 - Node 1, a GuruPlug Server running Debian GNU/Linux 6.0, Icom ID-1 transceiver and a Diamond X5000 aerial.

- Location 2 - Node 2, an Intel Atom based Notebook running

Ubuntu 10.04 LTS, Icom ID-1 transceiver and a Diamond X5000 aerial.

Location 3 - Node 3, an Athlon based Laptop running Ubuntu 10.04 LTS, Icom ID-1 transceiver and a Diamond X5000 aerial.

Location 4 - Node 4, an Intel Atom based Notebook running Ubuntu 10.04 LTS, Icom ID-1 transceiver, and a tri-band Mag-mount aerial, co-located with Node 3.

Node 1 could occasionally be heard by Node 3 and vice-versa, initially the signal was not strong enough for a reliable connection, or even successful packet decodes (tcpdump). However, later on in the testing it was noticed that the occasional Address Resolution Protocol (ARP) [15] request, and response, made it across the link between nodes 1 and 3, the machines immediately attempted to communicate directly, but the link seemed unable to carry full IP packets. Once the issue was understood, static ARP mappings were put in place and the nodes were configured through the Linux sysctl interface to ignore Internet Control Message Protocol (ICMP) [16] redirection messages. Nodes 2 and 3, while not quite line-of-sight, were always a good connection with a ping time in the order of 64ms. Node 4 was co-located with Node 3, with Node 4 connected to a magnetic antenna and running low power so that it could not be heard by nodes 1 or 2. .

The following tests were done in the Point-to-Point, Single Hop and Double Hop network configurations:

* Iperf
Wget
TCP Convergence Layer
NORM Convergence Layer

Wget was not used in the control tests, and, for the final test, Single Hop with interfering node it was deemed unnecessary to run three independent TCP based protocols, so only NORM and Wget were used.

Each test was repeated 25 times to get an average throughput figure for that particular protocol. Care was taken to run the tests under similar atmospheric conditions as rain and wind effected the signal strengths and hence data throughput. The Iperf tool was used to test TCP only and Wget was used to approximate a HTTP connection by getting it to retrieve a 6MB file. The results for both were generated by repeating each transfer 25 times.

To test the DTN Convergence Layers the dtnsend utility was used to send the same 6MB file as used in the TCP tests. dtnsend was configured to ask for a delivery receipt, thus confirming reception of the file at the destination node.

From these results a spreadsheet was compiled and all results were then converted into kilobits per second.

Results & Discussion

Looking at the Table below, "Control" results seem in line with general expectations. The DTN TCP-CL average throughput is slightly less than IPv4, i.e. the DTN overhead on an IPv4 packet is increasing the overall duration of the transfer. The

NORM result is interesting, it is using "unreliable" UDP, yet it performs significantly (almost 15%) better.

Though NORM is intended for reliable multicast delivery of file or stream objects, it is being used here for unicast delivery. NORM's ability to function with much less end-to-end interactivity than TCP allows for more efficient use of wireless links [17].

The note (84) in Table 8 below, indicates that NORM's rate control mechanism was configured to use a transmission rate of 84kbps. In previous work we used the well known, test, tweak settings, test again, method to determine the best performance that could be achieved by NORM over a D-STAR link.

Control			
Protocol	Min (kbps)	Max (kbps)	Average (kbps)
Iperf	66.4298	67.5769	67.0002
TCP-CL	63.3455	64.8974	64.3969
NORM-CL (84)†	76.7097	77.5527	77.1651

Point-to-point			
Protocol	Min (kbps)	Max (kbps)	Average (kbps)
Iperf	67.3000	69.0000	68.0000
Wget	55.7911	66.7826	63.0611
TCP-CL	52.0730	67.6054	64.3216
NORM-CL	74.0174	79.0396	78.0389

Table 8
Control &
point-to-point
results

In the point-to-point results in the Table above, it can be seen that on "real-world" links, Iperf, Wget and TCP-CL seem to perform similarly, with slight reductions in throughput compared to the "control". NORM however seems to have increased its throughput compared to the "control" tests. This is interesting considering the TCP-CL has remained approximately the same. One possible explanation for this is that the linux-based computers used to generate the "control" were much older and may not have been as efficient at processing UDP datagrams as the computers used for these experiments.

Protocol	Min(kbps)	Max (kbps)	Average (kbps)
Iperf	9.9200	34.9000	27.2808
Wget	19.9157	29.5385	26.0009
TCP-CL	15.3129	38.2490	25.1616
NORM-CL	37.4994	38.4632	38.1211

Table 9
D-Star
performance
on a single-
hop link

In the table above, where a single hop is introduced we can see that the Iperf throughput has dropped by (approximately) 60%, Wget by 59%, TCP-CL by 60%, NORM by 51%. Note the approximate 10% advantage that NORM has over TCP based protocols.

Protocol	Min (kbps)	Max (kbps)	Average (kbps)
Iperf	4.5900	18.1000	12.3292
wget	2.0192	19.6216	11.9851
TCP-CL	3.5409	32.3209	13.8637
NORM-CL	22.7116	25.4541	24.9753

Table 10 D-
Star
performance
on a two-hop
link

In the Table above, where a second hop is introduced we can see that the performance of Iperf has dropped a further (approximate) 55%, Wget 54%, TCP-CL by 45%, NORM by 35%. That gives a total degradation of (approximately) 82% for Iperf, 81% for Wget, 78% for TCP-CL and finally 68% for NORM. These results are graphed in the figure below.

Summary of results

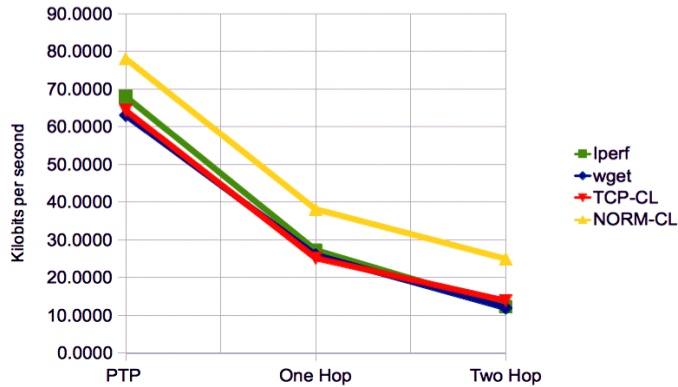
Finally the table below shows the figures for throughput from Node 2 to Node 3, in parallel with the 6MB file transfers, Node

(Continued on page 14)

(Continued from page 12)

4 transfers a 64kbyte file over TCP to Node 3 every 2 minutes. It can be seen that Wget shows only a 4% degradation, while NORM shows an 11% degradation in throughput. This is interesting of itself and will probably require further investigation. In spite of this, NORM still maintains an almost 13% advantage over Wget.

Table 11



Conclusions DTN over AX.25

The AX.25CM-CL now performs well, in both the throughput testing described here and in longer term usage testing for single-hop, point-to-point links, on dedicated radio channels. The previously reported over-acknowledgement within the Convergence Layer protocol can now be managed by defining the acknowledgement window appropriately based on the expected

Protocol	Min (kbps)	Max (kbps)	Average (kbps)
Wget	59.5782	62.1391	60.7134
NORM-CL	66.3910	71.7619	69.5582

link characteristics. Static links with good link budget margin can be tailored for with larger ACK windows. Intermittent links can be optimised for shorter ACK windows to mitigate against unwarranted duplication within reactively fragmented bundles.

The measurements taken provide an illustration that, on low-bandwidth links, the overhead of TCP/IP can be significant, and careful thought should be given to whether its use is really required. In this case, with a window of 1, a 20 byte (minimum) overhead on a 255 byte frame is over 7% overhead.

When comparing TCP/IP over AX.25 with the AX.25CM-CL for DTN2, we are comparing a protocol stack that is understood to perform badly when carried on challenged links with one that is explicitly designed for such environments.

In future work, we hope to continue development of an AX.25 discovery mechanism for DTN2 which will inter-operate with the APRS network. Also, a new LTP over AX.25 Convergence Layer for DTN2, tailored for use with low earth orbit Amateur Radio satellites will be investigated.

D-Star

From previous work, it was seen the DTN NORM Convergence Layer showed signs of being more efficient than the TCP/IP protocol over DD mode D-Star radio links. A 12% to 15% improvement using NORM over TCP is significant

enough, what was not expected was a dramatic difference between the robustness of NORM vs TCP. In these experiments we attempted to do an evaluation of NORM versus TCP in a more “real world” scenario. The locations for the nodes were chosen in the hope that they would cause difficulty, which indeed they did. Looking back at the results, the TCP tests they appear to be broadly in line with what would be expected, in that the throughput is best with Iperf, then Wget, then TCP-CL due to the extra overhead imposed. On Icom ID-1 transceivers, NORM appears to have an optimal transmission rate of 84kbps which gives anywhere from 12 to 15% improvement over TCP in our testbed.

For future work, it would be useful to compare two other DTN Protocols, Saratoga [18], developed by Surrey Satellite Technology Ltd and NASA Glenn Research Centre, and the Licklider Transmission Protocol, while also looking at the work being done in the High-Speed Multimedia (HSMM) area, and performing a useful comparison.

Acknowledgements

The authors would like to thank Nicky Madigan, EI3JB, for allowing us to place a node (node 2) at his house for the duration of our D-Star experiments. This work was partly funded by the HEA Research Facilities Enhancement Scheme, 2008.

Further Reading

- [1] The AX.25 protocol specification is at http://www.tapr.org/pub_ax25.html
- [2] Read more about Winlink 2000 at <http://www.winlink.org/>
- [3] The NACK-Oriented Reliable Multicast protocol <http://cs.itd.nrl.navy.mil/work/norm/>
- [4] For the brave, the specifications for LTP are here <http://tools.ietf.org/html/rfc5326>
- [5] The DTN Code can be downloaded from <http://www.dtnrg.org/wiki/Code>
- [6] The Delay-Tolerant Networking Architecture, <http://tools.ietf.org/html/rfc4838>
- [7] The Bundle Protocol Specification, <http://tools.ietf.org/html/rfc5050>
- [8] The KISS TNC, <http://www.ka9q.net/papers/kiss.html>
- [9] The Wikipedia entry on X.25, <http://en.wikipedia.org/wiki/X.25>
- [10] The gory details, <http://dl.acm.org/citation.cfm?id=1499984>
- [11] From Wikipedia, High-Level Data Link Control, http://en.wikipedia.org/wiki/High-Level_Data_Link_Control
- [12] Joong Ma's paper, On the Impact of HDLC Zero Insertion and Deletion on Link Utilization and Reliability, http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1095469
- [13] Iperf, <http://iperf.sourceforge.net/>
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Chiltern DX Club: The UK DX Foundation

The Chiltern DX Club (CDXC) is the UK's premier DX Foundation, with approximately 750 members, dedicated to encouraging excellence in DX'ing and contest operating. We fully support the DX Code of Conduct.

A Brief History of CDXC

CDXC, the UK's first and largest group of HF, DX and contest-oriented radio amateurs, was founded in the early 1980's by a small group of keen HF DXers in the Chiltern Hills of South East England.

CDXC, which quickly developed into a national then international DX foundation, is for amateurs with an interest in competitive activity on the HF bands (DXing, contesting and award chasing, etc.). As of 2010 there are over 750 members.

CDXC Objectives

To fund DXpeditions

A major aspect of CDXC activity is the sponsoring of HF DXpeditions, ranging from donations and provision of equipment for smaller operations, to large-scale logistical support - for example, to the highly successful VP8SSI (South Sandwich) and 3Y0PI (Peter 1) DXpeditions when team members were accommodated by CDXC during their UK stopovers.

However, our funds are limited, so we have to be selective and make sure that the DXpedition is well organised and that UK amateurs, in particular, will have a reasonable chance of making contacts. About half of our income can be made available for this purpose.

This means that we can fund DXpeditions to the tune of around £4,000 p.a. or, say, up to 15 DXpeditions p.a. We are now one of the most significant funding organisations in the world for DXpeditions.

To fund more DXpeditions we need more members. We have recently published our guidelines for sponsoring DXpeditions. We have supported many DXpeditions in recent years including the D68C DXpedition to the Comoros Islands in February 2001. This DXpedition was conceived and organised by CDXC members.

The 9M0C (Spratly Island), 3B9C (Rodrigues Island) and 3B7C (Saint Brandon) DXpeditions were made up almost entirely of CDXC members.

We also make a substantial donation to IREF each year in support of rare IOTA DXpeditions.

To encourage and support the younger and newer amateurs

A significant number of members joining in recent years were substantially younger than our average membership. This has been extremely encouraging. A club like CDXC needs new blood, new ideas and new initiatives, and we need to do whatever we can to encourage the newer and younger amateurs to join CDXC.

Just think about the HF Convention. It is almost totally depend-

ent on CDXC members doing their bit but it is the same 20/30 each year who are involved in lecturing and organising. We really do need more young members.

To publish an excellent bi-monthly magazine

The past years have seen not only an increase in size of the CDXC Digest but also an increase in quality, both of the content and of the finished product. Our thanks, of course, go to our Editors. Producing typically 50/60 pages every two months is a major challenge. The comment that has now been made on several occasions is, "It's the one ham radio publication I read from cover to cover". That says it all!

We now expect to have eight full colour photo pages in each Digest.

To create an environment where members can meet

Our main social get-togethers take place at the Annual Dinner, usually in the Spring, the AGM and Summer Social and at the RSGB Convention.

These events are well supported - the CDXC stand at the HF Convention is usually very busy! We attend several of the major rallies and there are also the "unscheduled" meetings with visiting overseas DXers as and when opportunities arise.

To issue achievement awards

The Penallt Trophy is awarded to the club member who contacts the greatest number of countries on the LF bands during March each year.

Dave EI9FBB won 80m in 2011.

The RSGB CDXC Cup is awarded to the leading single operator UK/ Channel Islands/ Isle of Man entrant in the CQ Worldwide SSB Contest High Power, Single Operator Section.

Plaques are awarded to the leading UK stations in the CQ Worldwide CW and SSB Contests Low Power Sections.

The club issues Merit Awards recognising outstanding contributions to HF DXing and also supports the Geoff Watts Memorial Trophy for the annual RSGB IOTA Contest.

The RSGB IOTA 40th Anniversary Programme "IOTA 2004" was managed by CDXC.

To keep the club on a sound financial basis and well administered

We keep a minimum of six months' membership income in the bank. We try to deal with membership applications, badge and Digest distribution and members' correspondence efficiently.

If you are interested in joining CDXC and becoming part of our vibrant DX community, you can use our web site to get more information about the club.

www.cdxc.org.uk



Lisa EI9GSB 2 years on

When I last wrote an article for this magazine, it was in relation to my first field day with North Cork Radio Group (EI1NC) at Blackrock and little did I know how much I was going to enjoy these field days or where the hobby was going to take me.

After my first activation, there were many more to follow. Little did I know how much planning and contacts had to be made prior to these events.

Cork City Gaol

The next activation was at Cork City Gaol. Cork City Gaol was a fabulous location where we had a brilliant time. The station did a brilliant job and we managed to speak to lots of our friends that we had made on Facebook as well as other DX stations that answered our call. A tour of the venue gave you an eerie feeling as the cells depicted what life was like in there and I remember it being quite cold.

Blackrock Castle

Since the first Blackrock Castle activation, I have attended activations at Blackrock Castle 3 times and each time I was surprised by another different aspect of the hobby. I had never experienced a digi station before and yet when one of the lads set one up and showed me how it worked, I was quite impressed. The thought that there were stations out there when nothing on the voice portion of the band could be heard intrigued me. On another visit, one of the other lads had a satellite station set up and yet again introduced me to another side of the amateur radio world.

Mizen Head

Mizen Head Visitors Centre was the next venue, this time for 4 days to celebrate Marconi Day. EI1NC were one of the Marconi award stations operating under EI0IMD. I have to

admit, this location was really beautiful. The scenic view, the waves crashing off the cliffs and the sun actually decided to pay a visit. The bands were in great condition and although the lads there did have issues with antennas, great fun was had. Although I didn't stay for the entire weekend, I did take a day trip down there and helped out with operations on the air.

I was surprised at the level of interest there is in this award. 15 Marconi stations to be worked on the air in order to achieve the award and although I tried, I hadn't managed to even hear some of them, then again, I wasn't exactly operating 24 hours for the contest, as were the lads that stayed down in Mizen.

Mighty Mizen Loop

Due to the issues last year with antennas at Mizen Head, some of the Group members Mick EI9GNB and Ciaran EI7GSB, committed themselves to building the "Mighty Mizen Loop", an impressive looking antenna (especially capacitor) which they will be testing at our next activation, Ballynamona Beach. The aim of the antenna is to work like a dream, despite the issues Mizen has to offer.

Many a contact is destined for reception by this antenna and I have to give credit where it is due, this is an impressive configuration of knowledge and design.

I wouldn't know where to start if I had to do this.

Blarney Castle

CASHOTA activations are something that I like to do and in 2011 EI1NC activated Blarney Castle for the first time. This occurred on the June bank holiday weekend and a few of us, whilst operating in the sunshine, got sunburnt and as a result of mine, I suffered sunstroke! Again, more beautiful surroundings and along with the gorgeous weather, this particular activation was a nice one to do.

Mallow Castle

Mallow Castle on the other hand was a bit of a challenge. I activated this castle by myself as part of CASHOTA weekend. Although also a first for the castle, the bands weren't in agreement and I was lucky to be able to get out at all. A few contacts were made but con-



Mallow Castle activated by Lisa EI9GSB



Mighty Mizen Loop



Tom McCarthy SWL being presented with his certificate for operating EI1NC/P at Blackrock Castle by Group Secretary Lisa EI9GSB



Members of the North Cork Radio Group pictured at Mizen Head during International Marconi Day 2011

ditions were so poor, I ended up giving up after a few hours. I have never personally experienced that before, and was quite disappointed about having to give up, but there was no way I was going to manage to get anymore contacts despite my best efforts.

2012

2012 is looking like a very active year for activations. I have already taken part in activating Blackrock Castle so far this year, as stated above, and there are many more activations in the line.

The year will consist of some old activations, some new, some already confirmed and some still in planning phase.

I came from no interest in the hobby, to obtaining my licence, attending activations and learning new things at every turn.

Digi Modes

The newest area of the hobby I have taken an interest in is digi modes. I am currently using PSK 31 and have had great fun making contacts.

Collecting DXCC's from the beginning again is another challenge but it is so enjoyable to be able to sit there and see your waterfall dancing with all the stations up for grabs on the band. I have more recently branched out to PSK 63, a bit

faster and more hectic, but I may even prefer this due to the speed of the contacts being better. I have even taken part in my first PSK contest this weekend (10th March).

I am still having great fun, and enjoy attending the meetings every fortnight for a bit of craic and banter. I would consider the people in North Cork Radio Group my personal friends, the kind that you can say or do anything around and they won't care, or may even join in with you!

I have also made some great friends through Facebook via EI1NC page, the repeaters, bands and rallies I have attended, and look forward to chatting to these people who are always there in some form or other for a QSO.

I can't believe how far I have come since I obtained my licence. I am totally up for learning new things and look forward to the new challenge.

If the past 2 years is anything to go by then I have some great years ahead!!

Lisa EI9GSB



QSL Card for Blarney Castle activation



Ciaran EI7GSB and Mick EI9GNB assembling loop



Excerpts from the HX files

A Look at ATV with Pat Fitzpatrick EI2HX - Excerpt 020

Hello and welcome to the Xcerpt 020 of the HX Files.

In this months Echo Ireland I would like to talk about a permanent mobile ATV unit.

Although having made a portable/mobile unit a few months ago, thoughts that it might be very handy to have an ATV station semi-permanently setup in the car came to mind. The system could be left in the car but would be removed if the weather should turn frosty for a protracted time and that may cause all the smoke to get out if it was left unused in the winter time and woken up in our summer (around 2 weeks in May).

This transceiver would have to be safe to use with very little having to be manually adjusted and using as many parts that have an auto function option as possible. As it is illegal to have a mobile/cell phone in your hand whilst driving, the chances of time in the slammer would be a sure thing if you had a camcorder, lights and clapper board in your hands, it would be literally a case of car crash TV for sure.

The first job before even starting to build the transceiver would be the location of the cameras and what type to use, obviously the smaller the better as you would not want them to interfere with you seeing where you were going.

Luckily thanks to the parts department the cameras were found that were needed.



In photo 1 you can see the cameras that would be used in the project.

The locations of the cameras would be dictated by the safe routing of the audio, video and DC cables, only one of the cameras was capable of sound (the camera on the left in photo 1) and its audio line would be connected straight to the transmitter and that would mean that it



didn't matter what camera was in use as the audio would be always be inline.

The camera that had sound would be mounted on the front pillar and the second camera would be mounted in the centre of the dashboard as there was a spareswitch blanking plate as the model of my car had not got a particular optional accessory fitted (ejector seat), so removing the blanking plate exposed an opening that was a perfect fit for that camera.

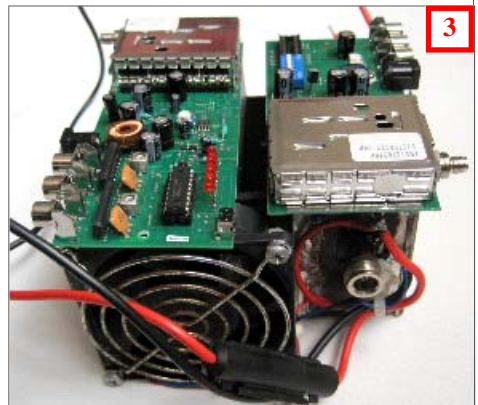
The camera had its own mounting bracket and some of it was used in the cameras installation. The most awkward part of that job was making sure that the cables were well away from the adjustment levers for the air vents.

Next jobs to plan were the type of enclosure to use for the transceiver be it either a metal or plastic, and whether to place the transceiver inside the car or on the outside. The size of the box that was to be used was a bit to big to install in the car when you think of where all the cables had to be routed, and where it would not get in the way of operating the car, or any passenger, so outside it was to be. Where to place it? On the bonnet making it look like an air intake for the supercharger or painting it blue and placing it on the roof? So under the boot behind the bumper it was to be.

I had to make sure that the box and the cables were not visible by people from under the car, as they may think that a box and cables hanging from under a car is something other than an ATV transceiver, (unless they were my neighbours, as they would be use to seeing strange things sticking out of my car, and they would be more likely to phone the home

for the bewildered and put Pat out of his misery).

As my car has a tow bar fitted and also has some other factory fitted threaded holes for various other fittings including of course the fact that it is available in left hand drive for other markets, there would be plenty of places to secure the unit but making sure that it had plenty of cooling



air passing over it.

The aerial, an Alford Slot, would not be permanently mounted on the car so I would be using some good coaxial cable (Aercel 10) but as short as possible, and I would be using some quick form of lock / unlock poles and they and the aerial would be left in the car when not in use. Something else to consider was the monitor I would use to watch the received signals when I parked.

Having chosen the metal box, the first thing done was to see what type of brackets would have to be made to attach the unit to the car.

Once the brackets were fitted to the box it was coated inside and out and this would protect it as the box was one of the die

(Continued on page 19)

(Continued from page 18)

cast aluminium types. Those that have used them without any protective covering would know that in our climate they could get a bit of a dusty coating inside and out and without that protective coating the conductive dust that formed would/could fall from the inside and possibly short out the transceiver and let all the smoke out.

So after having let the coating harden for a few days, I covered it with some masking tape so it could be mark out were I was to drill and also to protect the painted finish as I could repaint any bare metal that there was after the drilling, cutting and filing.

After laying out the parts (most can be seen in photo 3) to see what went where for the best placement of the parts being used, the first thing done was to put the amp on the side that would have the most air passing over it and then a hole slightly smaller than the fan would be cut out of the project box.

Not wanting to just rely on the box as a heat sink, the amp would have its own fitted, so when I would be parked the transceiver would not get too hot, and also, fitting a cooling fan that would not mind getting a few splashes from the puddles that would be driven through, so using a heat sink and attaching it to the amp and then being placed close to the drilled hole in the project box and the fan in it also, it will be running cool.

When the final place for the unit was chosen some time was spent on seeing how to run the various cables to it and how to gain access to the car from the underneath and not let anything in like water or exhaust gases.

The cable was brought in through the boot of the car and the under the rear seats up to the front seats. At that end of the cable was terminated into a box and that box would be fed with the DC cable and the Audio/Video from the camera in use via a switching unit (photo 4).

The box would also have cables for the received Audio and Video.

The monitor to be used would have to be a small one and the one I had in mind was a 100mm and it could be easily stored when not in use in the glove box as I would not be receiving signals while mobile as that would not be safe or legal. As the amplifier and other parts would use around 8 amps I deciding splicing into the rear wiring loom would not be an option as the loom would not be able to handle that current. I did not like the idea of a permanently live cable running the full length of the car even fitted with

fuses from the battery carrying high amps, so I had a smaller lead from the battery to a connector that would plug into the main termination box that was fitted inside a storage bin in the car for music cassettes,(remember them, and the 8-track tapes) and when it was needed the two ends were connected, a switch on the rear end of the lead was fitted to power on and off the transceiver.

Not wanting to be adjusting anything whilst driving, sometime was spent initially setting up the cameras and using a 50mw transmitter at first was able to monitor the signal myself as well as sending a signal to Tony EI4DIB who could give a live report on the picture from the cameras and the sound via 2m.

Tony was also able to help fine tune the audio when I used the full mobile setup on the road as having another pair of ears and eyes would save me a lot time later on by doing all the major adjustments now and not after a number of QSO's.

A few tests were also done with the aide of Derek EI7CHB from Skerries.

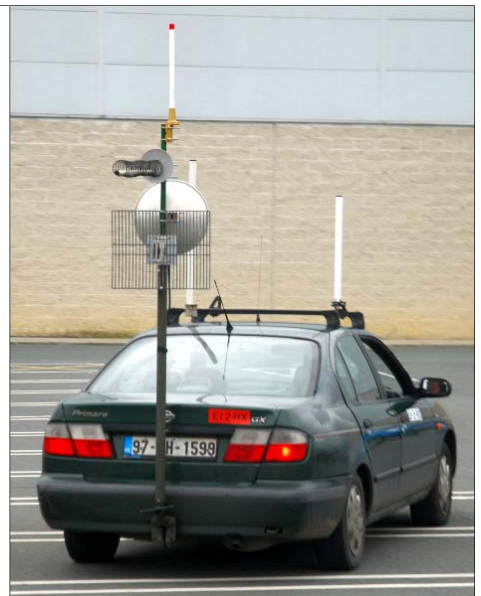
As these tests were at night, I was using an infrared camera (on the right in photo 1) for a different view and as before the infrared camera was bolted to the towing eye on the front of the car.

With all the tests done and the transceiver bolted in place I will be using it when I am visiting the local Hams and SWL'ers that have an ATV setup.

As you can see from photo 2 there is not a lot to see from the outside of the car and I do not know if I will be 10GHz mobile much of the time, as the dishes I have at the moment are all the solid type and that would cause some drag a when in use as it would catch some air.

A Horn type aerial would do the same. Anyway off to the funny farm with me for some shock therapy, but before I go, I would like to again thank Tony and Derek, for helping with the trials and testing and Anthony EI2KC for taking some of the photos.

May all your signals be 5 and 9.





Contest Corner

by IRTS Contest Manager Thos Caffrey EI2JD

On this page you will find the EI Records for the CQ WPX SSB contest and on the opposite page the EI Records for the IOTA contest.

There are two things you may notice on both lists, the first being the empty spaces where there is no EI entry in that particular section and the second being the amount of sections there are in each of the contests, especially the IOTA contest.

There has been a lot of interest by the contest organisers in the assisted versus the non-assisted sections.

The non-assisted being the section you enter when you are using your radio which is connected to your antenna(s), your amp (if you use one) and your log, either hand written or logging programme software on your computer.

The assisted section is using all of the above but with the added assistance of utilities, programmes or software to aid in making a QSO.

This includes the use of internet pages such as DX clusters, packet spots and CW Skimmers.

If you make use of DX clusters or CW skimmers to help you find another QSO or an elusive multiplier then you must enter the assisted section.

The assisted sections are becoming more popular in contests but if you look across the page you will see eight (8) sections in the CQ WPX contest where no EI has entered a log.

I hope when I check again next year to see your call sign where I now see *no entry*.

Pick a band, use a logging programme, do a couple of hours during the 48 hours of the contest and email your log to:

ssb@cqwpx.com

Hope to hear you in the IRTS 2m Counties contest on Easter Monday.

Field Day rules have been updated. Have a look on the IRTS website and see if you can interest a few colleagues to get out in the open air and play radio. It's great fun!

73 de Thos EI2JD

CQ WPX SSB Contest Score Records for Ireland 1975 - 2011

Category	Call	Year	Score	WPX
Multi-Operator				
Multi-Multi	<i>no entry</i>			
Multi-Two	EI9E	2010	10,687,157	1,153
Multi-Single	EI7M	2006	11,877,888	1,216
Single Operator - High Power				
High All	EI4DW	2000	2,905,104	696
High 10m	EI8GS	1991	2,947,605	565
High 15m	EI4VFM (G3YOG)	1989	160,310	205
High 20m	EI9HX	2011	3,256,092	876
High 40m	EI7M (EI3JZ)	2011	10,787,690	1,054
High 80m	EI7M (LY3MM)	2010	3,527,075	731
High 160m	EI7M (EI8IR)	1992	48,168	108
Single Operator - Low Power				
Low All	EI8QGB (ON4EI)	2011	2,141,737	667
Low 10m	EI8GP	2001	1,081,442	382
Low 15m	EI4II	2011	346,290	357
Low 20m	EI4CF	2004	595,518	462
Low 40m	EI/DL5AUA	2005	3,220	35
Low 80m	EI9JN	2005	101,332	188
Low 160m	<i>no entry</i>			
Single Operator - QRP				
QRP All	EI4II	2010	52,152	164
QRP 10m	<i>no entry</i>			
QRP 15m	EI4GXB	2010	5,080	40
QRP 20m	EI6KC	2011	15,048	114
QRP 40m	<i>no entry</i>			
QRP 80m	<i>no entry</i>			
QRP 160m	<i>no entry</i>			
Single Operator Assisted - High				
High All	EI2CN	2008	939,875	515
High 10m	EI2CN	2011	58,112	128
High 15m	<i>no entry</i>			
High 20m	EI9HX	2010	2,452,703	761
High 40m	EI6JK	2011	690,931	419
High 80m	<i>no entry</i>			
High 160m	<i>no entry</i>			
Single Operator Assisted - Low				
Low All	EI7GL	2001	79,674	147
Low 10m	<i>no entry</i>			
Low 15m	EI4CF	2011	1,679,330	610
Low 20m	<i>no entry</i>			
Low 40m	<i>no entry</i>			
Low 80m	<i>no entry</i>			
Low 160m	<i>no entry</i>			



Islands on the Air Contest EI Records (inc. 2011)

Unassisted, Fixed, Single-Operator, High Power, 24 Hour					
Mixed	EI5DI	1,422,330	1,445	182	2010
CW	EI4BZ	477,480	660	115	2001
SSB	EI8IR	2,546,061	2,091	217	2004

Unassisted, Fixed, Single-Operator, Low Power, 24 Hour					
Mixed	EI4CF	336,936	628	101	2007
CW					
SSB	EI8GQB	1,040,322	85	166	2011

Unassisted, Fixed, Single-Operator, QRP, 24 Hour					
Mixed					
CW					
SSB					

Unassisted, Fixed, Single-Operator, High Power, 12 Hour					
Mixed					
CW	EI4DW	181,944	382	76	2002
SSB	EI7GL	612,456	424	151	2001

Unassisted, Fixed, Single-Operator, Low Power, 12 Hour					
Mixed	EI8GS	446,124	970	94	2007
CW	EI4CF	365,148	511	108	2009
SSB	EI4GXB	380,352	380	112	2009

Unassisted, Fixed, Single-Operator, QRP, 12 Hour					
Mixed					
CW	EI8FH	11,730	62	23	2010
SSB					

Assisted, Fixed, Single-Operator, High Power, 24 Hour					
Mixed	EI2JD	2,909,280	1620	290	2009
CW	EI6KC	754,314	1,358	121	2010
SSB	EI9HX	1,177,176	1,200	154	2009

Assisted, Fixed, Single-Operator, Low Power, 24 Hour					
Mixed					
CW	EI9ES	163,680	216	88	2008
SSB	EI7JZ	135,561	227	73	2010

Assisted, Fixed, Single-Operator, QRP, 24 Hour					
Mixed					
CW					
SSB					

Assisted, Fixed, Single-Operator, High Power, 12 Hour					
Mixed	EI3IO	456,492	584	109	2008
CW					
SSB					

Assisted, Fixed, Single-Operator, Low Power, 12 Hour					
Mixed					
CW	EI2JD	84,630	107	70	2010
SSB	EI3HA	71,736	167	56	2008

Assisted, Fixed, Single-Operator, QRP, 12 Hour					
Mixed	EI8JB	33,264	96	36	2010
CW					
SSB					

DXpedition, Multi-Operator, Mixed Mode, 24 Hour,					
High Power	EJ2MT	10,202,165	3,209	505	2005

Fixed, Multi-Operator, Mixed Mode, 24 Hour,					
High Power	EI7M	6,194,952	2,632	417	2002
Low Power					

Unassisted, DXpedition, Single-Op, High Power, 24 Hour					
Mixed					
CW					
SSB					

Unassisted, DXpedition, Single-Op, Low Power, 24 Hour					
Mixed	EI9JQ	884,856	788	161	2007
CW					
SSB					

Unassisted, DXpedition, Single-Op, QRP, 24 Hour					
Mixed					
CW					
SSB					

Unassisted, DXpedition, Single-Op, High Power, 12 Hour					
Mixed					
CW					
SSB					

Unassisted, DXpedition, Single-Op, Low Power, 12 Hour					
Mixed					
CW					
SSB	EI5JQ/P	78,660	172	57	2010

Unassisted, DXpedition, Single-Op, QRP, 12 Hour					
Mixed					
CW	EJ2KF	1,428	40	7	2011
SSB					

Assisted, DXpedition, Single-Op, High Power, 24 Hour					
Mixed					
CW					
SSB					

Assisted, DXpedition, Single-Op, Low Power, 24 Hour					
Mixed					
CW					
SSB					

Assisted, DXpedition, Single-Op, QRP, 24 Hour					
Mixed					
CW					
SSB					

Assisted, DXpedition, Single-Op, High Power, 12 Hour					
Mixed					
CW					
SSB					

Assisted, DXpedition, Single-Op, Low Power, 12 Hour					
Mixed					
CW					
SSB					

Assisted, DXpedition, Single-Op, QRP, 12 Hour					
Mixed					
CW					
SSB					

Success at WRC-12

With the signing of the Final Acts of WRC-12 on Friday, 17th February, the amateur service had a new global secondary allocation at 472 to 479 kHz.

This is the culmination of ten years of lobbying of Administrations by IARU Societies worldwide which started when the question of an MF allocation was raised at the IARU Region 1 Conference in 2002 in San Marino.

The maritime mobile service is the primary user in the band 435 to 495 kHz and the aeronautical radio navigation service also uses the band 415 to 495 kHz.

The amateur service must not cause interference to these services. Ensuring the protection of these services by a block of countries was one of the reasons why the proposal had a very difficult passage through the WRC decision making process. In fact the proposal was not agreed until it had reached Committee 4, the final authority before the Plenary sessions. There is a fairly long list of countries that signed up to a footnote permitting them not to allow amateur operation in the 472 to 479 kHz segment.

The power level is to be 1 watt EIRP but countries more than 800 kilometres from a list of specified countries can increase this to 5 watts EIRP at their discretion.

While the new allocation became effective on the signing of the Final Acts of the Conference it will be a matter for each Administration to determine when amateurs will have access to the new band as well as the modes and bandwidths that may be used.

Another bit of good news from the Conference is that a first reading of the Draft Agenda for WRC-15 was approved.

It includes item 1.4 which proposes consideration of an amateur service allocation around 5.3 MHz at the next WRC.

Credit must be given to the IARU societies throughout the world that have worked on these two projects for the best part of 10 years.

We should make special mention of Colin Thomas G3PSM, Chairman of the IARU Region 1 External Relations Committee, who was appointed CEPT Coordinator for the MF allocation item and who has done tremendous work in this capacity over a number of years to achieve a CEPT Common Position on the item which contributed in no small way to the successful outcome at WRC-12.



Worlds Tallest Free Standing Broadcast Tower

Tokyo Sky Tree, the world's tallest free-standing broadcast tower, is now officially completed, dailymail.com reports.

The 634-metre tower will house five commercial stations based in Tokyo and public broadcaster NHK and will serve as the country's next generation digital broadcasting facility.

The stations needed a new broadcasting tower to prevent skyscrapers in downtown Tokyo from adversely affecting radio waves.

The current transmitting station, the 333-metre Tokyo Tower, was considered no longer tall enough to fully cover digital terrestrial television broadcasting.

Tokyo Sky Tree, which is situated in Tokyo's Sumida Ward, will officially open on 22 May, when visitors will be able to enjoy a view from two observatories, and there will also be restaurants, office buildings and shops. The opening of the tower will also see the creation of a new town in the area - Tokyo Sky Tree Town, covering an area of 230,000 square metres.

Cashota Monument Month April 2012

CASHOTA (Castles and Stately Homes on the Air) will be holding the first Monument Month over April 2012.

This annual award event involves activating Monuments which as defined by Wikipedia, a monument is a type of structure either explicitly created to commemorate a person or important event or which has become important to a social group as a part of their remembrance of historic times or cultural heritage, or simply as an example of historic architecture.

Everyone is welcome to participate, with all details of the event, including how to register, being available at

<http://www.cashotamonuments.webs.com/>

If you require more information contact Steve EI5DD at

South Eastern Amateur Radio Group

The Annual General Meeting of South Eastern Amateur Radio Group took place on Monday 27 February 2012.

The new committee elected is as follows;

Chairperson: David Gainda EI6GVB
Vice-chair: Francis Lenane EI5GOB
Secretary: John Ronan EI7IG
Treasurer: Mark Wall EI7IS
PRO: Michael Hoban EI5DCB

Officers: John McCarthy EI8JA,
Michael Drennan EI7GH
Dennis Drennan EI1629.

The club would like to thank everyone who attended and would like to thank the outgoing committee for their work throughout the past year.

Further information is available on the membership page of the clubs web site at www.searg.com

Marconi first radio reports at Kingston Regatta 1898

Marconi's telegraphed reports from the Kingstown Regatta of 1898 were the first in history. Now they are going under the hammer

One of the biggest scoops in Irish newspaper history involved the Kingstown (Dún Laoghaire) Regatta in the summer of 1898. The results of the yacht races were not especially interesting, but the technology used to transmit them was revolutionary.

Guglielmo Marconi, the Italian inventor of wireless telegraphy, was commissioned by TP Gill, editor of the *Dublin Daily Express* newspaper, to report the results of the races "direct from the high seas". The newspaper chartered a yacht, *The Huntstress*, for Marconi, who set up his equipment and a mast on board. He followed the regatta 10 miles out into Dublin Bay, to Kish Lighthouse, and, on July 20th, 1898, sent back the first-ever press report by wireless telegraphy to a land station in the harbourmaster's office. This report was printed on a Morse tape machine, decoded and telegraphed to the newspaper's newsdesk.

Two lengths of this original Morse-code ticker tape, measuring 24in and 19in, framed along with Marconi's visiting card and a photograph, will go under the hammer at Mealy's two-day rare-books auction in Dublin next month.

Auctioneer George F Mealy says that the Kingstown Regatta report "was the first use of wireless telegraph for a commercial, journalistic or sporting purpose; an international first of enormous significance".

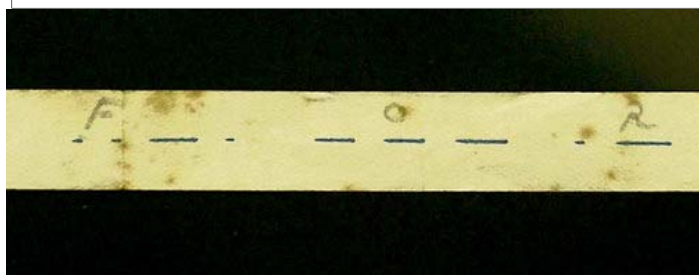
Mealy has assigned the item a pre-sale estimate of €5,000 to €20,000. It was in the personal collection of TP Gill, who died in 1931, and is being sold by a descendant who inherited it.

Writers and sub-editors everywhere will be amused to know that the breakthrough technology's inaugural message contained a typo. The strip of Morse records the first words transmitted as: "HERE A WIRE FORM [sic] MR MARCONI."

Marconi, who was born in Bologna in 1825, had strong Irish connections. His mother was Annie Jameson, a member of the whiskey-distilling family of Daphne Castle, Co Wexford, and his first wife was Beatrice O'Brien, daughter of Edward Donough O'Brien, the 14th Baron Inchiquin of Co Clare. Marconi established transatlantic wireless stations at Crookhaven, Co Cork, and near Clifden in Connemara. His inventions were credited with saving many lives following the sinking of *Titanic* in 1912. Two radio operators on the doomed ship were employees of his company and a report into the disaster claimed that "those who have been saved, have been saved through one man, Mr Marconi . . . and his marvellous invention".



Making the *Dublin Daily Express* deadline: two lengths of Marconi's original Morse-code ticker tape, framed with his visiting card and a photograph



Marconi, who was a joint recipient of the Nobel Prize for Physics in 1909, died in 1937.

The two-day auction of Marconi memorabilia will take place at the D4 Berkeley Hotel in Dublin on December 13th and 14th

MICHAEL PARSONS

(Reproduced with permission from the Irish Times)

Editor's note: The item of Marconi memorabilia described in this article did not sell at auction and at date of going to press was still for sale through Mealy's Auctioneers.

IRTS is grateful to the Irish Times and Mealy's Fine Art Auctioneers for permission to reproduce the original article.

International Marconi Day April 21st 2012

The 25th Annual International Marconi Day event will be held this year over 24 hours on Saturday April 12th.

At the time of writing there were no EI stations confirmed on the IMD web site but the North Cork Radio Group have announced their operation again this year from the Mizen Head Visitor Centre and Cork Radio Club will return to Brow Head near Crookhaven.

Keep an eye on GB4IMD.com for station updates.

AMSAT-UK Colloquium 2012 First Call for Speakers

The AMSAT-UK International Space Colloquium will be held in Guilford on September 15/16th.

AMSAT-UK invites speakers to cover topics about micro-satellites, CubeSats, Nanosats, space and associated activities for this event. Papers are also welcome for publication on the AMSAT website. Full details on:

www.ukamsat.org



Summits On The Air (SOTA)

The Summits on the Air (SOTA) programme celebrates its 10th anniversary this year. SOTA is an award scheme for radio amateurs and shortwave listeners that encourages portable operation in the hills, with awards both for Activators (those who climb the summits) and Chasers (operating from home, or as Activators on other summits).

SOTA is based around a number of Associations, each covering a separate geographic region. Starting with just two Associations in March 2002 (England and Wales) the programme has become worldwide and now has 56 Associations. The EI Association has been active since March 2003.

There are 387 eligible SOTA summits in EI (hills with a drop of at least 150 metres on all sides regardless of distance).

GI has 66 eligible summits.

Operation is on all bands although, in Europe, 2 metres and 40 metres are the most popular, with both SSB and CW in use on the HF bands.

Activity within EI has been relatively low, with only about one-third of summits activated. The GI summits have been busier, with almost all summits activated. One enthusiastic EI and GI summit activator is Phil ON4TA, pictured above, who has just finished his third visit to Ireland specifically to climb the hills and activate them. Phil has been on more Connemara hills than many of our local hill-walkers, and has kept the 40m, 20m and 4m bands busy during his stints on the hilltops. In recent weeks we have also heard Victor GI4ONL and Victor MI0JST on many of the GI hills ranging from Antrim to the Sperrins to the Mourne.

See www.sota.org.uk



Phil ON4TA operating from the comfort of a tent on the summit of Tonlaguee, the third highest peak in County Wicklow.



THE RADIO AMATEUR OLD TIMERS' ASSOCIATION (RAOTA)

The Radio Amateur Old Timers Association seeks to keep alive the pioneer spirit and traditions of the past in today's Amateur Radio by means of personal and radio contact, whilst being mindful of any special needs.

Full Membership : Open to anyone who has been actively involved in Amateur Radio for over 25 years. This does not mean that you need to have held an Amateur Radio licence for the whole of that period of time, or even have held one at all.

Associate membership : Those who have been actively involved in Amateur Radio for a shorter period are warmly invited to apply for Associate Membership. This carries all the benefits of full membership, but without the voting rights.

All members receive our quarterly magazine, OT News, which is professionally printed using digital techniques. OT News is also available on Cassette. For details see the Audio Tape Page.

Come and see us at the Lough Erne Amateur Radio Club Rally in Lisnaskea on Sunday April 1st

www.raota.org

Youngsters On The Air Belgium-The Netherlands 2012



During the summer of 2012 a youth radio camp will be held in Belgium, organised by UBA youth commission and VERON. Location will be close to the Dutch border. During this week many young radio amateurs from 10 different European countries will be participating in different activities such as contesting, ARDF, presentations, field days, visiting radio stations etc.

This week will be organised by members of VERON and UBA.

It will be a great experience for the young hams which they will never forget.

When: 19th –26th August 2012.

Participants: 10 teams from different European member associations of IARU Region 1.

A team consists of 1 team leader, this could be an older person and 4 team members aged between 18 and 25 years.

Location: Eeklo, Belgium.

Fees: 30% of travel costs and above this €30.00.

All other costs will be covered by the Youth in Action programme of the European Commission.

Interested amateurs within the age bracket are asked to contact:

Ger McNamara EI4GXB at ei4gxb@gmail.com or telephone 087-2532512.



Irish Radio Transmitters Society

80th Anniversary AGM Weekend



**Hosted by
Dundalk Amateur Radio Society**

Fairways Hotel, Dundalk, Co. Louth

Saturday April 21st - IRTS Annual Dinner
at 2000 - Tickets €32.00

Sunday April 22nd - Radio Rally

Doors open 1100. Admission €5.00

Bookings for Dealers' Stands to Thos EI2JD.

DARS members will be available to help dealers load/unload equipment on Sunday.

IRTS AGM at 1400

All paid up IRTS members welcome

Talk in Saturday & Sunday on Dundalk Repeater 145.675MHz

Talk on DX Code of Conduct by EI6FR - Talk on SD Logging by EI5DI

The IRTS 80m News will be read from the Rally at 12 noon.

A demonstration station HF station will be on display for the general public

[DXCC Card checking available - Bring your cards](#)

Dinner Tickets & Rally enquiries to

Thos EI2JD on 087-2953256

www.irts.ie - www.ei7dar.com

Fairways Hotel Rates

Double Room B&B - €65.00

Single Room - €55.00

Telephone hotel on 042-932 1500

Mention Dundalk Amateur Radio Society/IRTS when booking!

North Cork Radio Group Annual Radio Rally & Electronics Fair Sunday, 9th September 2012

**The Roebuck Room, Commons Inn,
New Mallow Road,
Blackpool, Cork**

**Doors open at 11am and admission is €5 per person
(children are free, as per usual).**

Raffle tickets will also be available at the door.

**The usual traders will be present and anyone wishing to reserve
a table or interested in setting up a stall, should contact**

**Edwin Van Mierlo EI2HEB
on 086-3885741
or via email at ei2heb@ei1nc.com**

Members Advertisements

For Sale:

Optibeam 9/5 Yagi covering
20/17/15/12/10 metres with single coax
feed and low SWR across all bands.
Excellent condition, price €750.00 o.n.o.
Contact Aidan EI8CE,
aidanei8ce@eircom.net or 087 9881021.

Wanted:

Broken Yaesu FC 707 or Yaesu FC 700
ATU, for parts. (SWR/power meter re-
quired for either tuner)
Contact Hugh (EI2HI) on 087-2333226
or ei2hi@eircom.net.

Shack Clearance:

Entire contents of shack for sale.
Elecraft K1 CW transceiver, power sup-
plies, SWR bridges (Elecraft).
Sundry test devices + Philips 50Mhz Os-
cilloscope.
Construction equipment (soldering irons
etc).
Aluminium and steel mast sections,
RG8U coax, connectors and adaptors,
300-Ohm ribbon, components.
Morse keys and more.
No reasonable offers refused.
For full list, details and prices, contact
Pat EI8CN fep127@yahoo.co.uk

Members adverts to ei4bz@eircom.net

Contest Calendar

All Times UTC

March 2012

24-25	Sat 0000 - Sun 2359	CQ WW WPX Contest	SSB
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April 2012

09	Mon 1400 - Mon 1600	IRTS 2m Counties Contest	FM/SSB
14-15	Sat 0700 - Sun 1300	Japan International DX Contest	CW
14-14	Sat 1600 - Sat 1959	EU Sprint Spring	CW
20-21	Sat 2100 - Sun 2100	Holyland DX Contest	ALL
21-21	Sat 1600 - Sat 1959	EU Sprint Spring	SSB

May 2012

05-06	Sat 2000 - Sun 2000	ARI International DX Contest	CW/SSB/RTTY
12-13	Sat 1200 - Sun 1159	CQ-M International DX Contest	CW/SSB
19-20	Sat 1200 - Sun 1200	The King of Spain Contest	CW
26-27	Sat 0000 - Sun 2359	CQ WW WPX Contest	CW

June 2012

02-03	Sat 1500 - Sun 1500	IRTS CW Field Day	CW
16-17	Sat 0000 - Sun 2359	All Asian DX Contest	CW
17	Sun 1400 - Sun 1700	IRTS 80m Summer Counties	CW/SSB
23-24	Sat 1200 - Sun 1200	The King of Spain Contest	SSB

July 2012

7/8	Sat 1400 - Sun 1400	IRTS VHF/UHF Field Day	CW/SSB
14/15	Sat 1200 - Sun 1200	IARU HF Championship	CW/SSB
21/22	Sat 1800 - Sun 2100	CQWW VHF Contest	CW/SSB
28/29	Sat 1200 - Sun 1200	IOTA Contest	CW/SSB

We have lost one DXCC entity!

Malyj Vysotskij Island - often known as "MV Island" (prefix R1M) which is part of Russia, was leased to Finland from the 1960s until very recently and, under the DXCC rules, was considered a separate DXCC entity. Since February this year, the island is no longer leased to Finland and is therefore a "Deleted Entity" in the DXCC programme.

This reduces the number of current DXCC entities to 340.

See www.irts.ie/dxcc for an updated list of EI call signs in the DXCC listings.

Congratulations to two new entrants to the EI DXCC list - Seamus EI9CF and Claus EI7JZ.

Claus is no stranger to the DXCC programme, as he is on the Honor Roll under his Austrian call sign OE6CLD.

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www.niradios.co.uk

Please note: I can still be contacted at jimbobtraynor@utvinternet.com

Lough Erne Amateur Radio Club

Annual Rally

The Share Holiday Village,
Lisnaskea, County Fermanagh
BT92 0EQ

Sunday 1st April 2012

Bring & Buy, Caravan Park,
access from Lough Erne/Shannon Waterway
Food and parking on site.

Doors open 1130

Further details from Iain: 028 66326693

iain@learc.eu

<http://www.lougherneradioclub.co.uk/>

Bangor and District ARS Summer Rally.

**Saturday 7th July 2012
at 1130**

Donaghadee
Community Centre,
Donaghadee,
County Down

More information on
www.bdars.com

Contact Bill GI4AAM
for further details:
Tel: 028 9181 6707

Email:
bill.langtry@btinternet.com

Mayo Rally

Welcome Inn Hotel
Castlebar

November 18th 2012

Irish Radio Transmitters Society

2m Counties Contest

Easter Monday April 9th

1300 - 1500



Radio News

Input to newsteam@irts.ie

Deadline Thursday 1200

South East Communications

**Amateur Radio
Marine VHF
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**Gary O'Hanlon,
Ashbury House,
Dunmore East,
Co. Waterford.
Tel: 051-385853
087-2513772**

Used Equipment - All prices for straight sales

Adonis AM-503G. Both Microphones wired for Kenwood	€65.00
Alinco DM330MW. 30 Amp Switch Mode Power supply. New	€39.00
Alinco DX-SR8E. Latest HF Rig from Alinco. New	€699.00
Ameritron 811 HXCE. 800w Amplifier. As new.	€899.00
Antron 99 Fibreglass Base Antenna, 10/12m	€89.00
AOR SDU 5000. Spectrum Display Unit. As new condition	€499.00
Diamond SX-400 SWR Meter. 2m/70cms. 200w.....	€85.00
Garmin Quest Handheld GPS. Ireland & Europe	€9.00
Icom UT-106. DSP Unit for IC-706 etc.....	€75.00
Icom IC-775 DSP. 200w base station. Auto ATU. VGC	€1,499.00
Icom IC-781. 150w Base transceiver. Boxed. Mint Condition	€1,499.00
Icom ICR-7000. 0-2000MHz. All Mode Receiver	€599.00
Icom ICR-8500. 0-2000MHz. All Mode Communication Rx.....	€1,199.00
Icom ICR-9000. Top Class Communications Rx. 0-2000MHz	€1,499.00
JRC NRD525. All Mode, top class shortwave receiver.....	€599.00
Kenwood AT-230. 200w Manual ATU	€75.00
Kenwood MC-80. Desk mike for all Kenwood radios	€79.00
Kenwood R-2000. 0-30MHz with VHF converter fitted	€399.00
Kenwood THF7E Dual band H/H transceiver with 0-1300MHz Rx.....	€99.00
Kenwood TS-711E. 25w 2m base station	€249.00
Kenwood TS-811. 25w 70cm base station.....	€259.00
Kenwood TS-2000. HF-70cms. Auto ATU, DSP, 3yrs old.....	€1,249.00
Kent Brass Straight Morse Key. Boxed, New.....	€89.00
LDG KT-100. Auto for FT817.....	€49.00
MFJ Deluxe CW Paddle.....	€75.00
MFJ 969. 300w Roller Coaster Antenna Tuner. Demo	€249.00
Microwave Modules 144 MHz Linear Amp. 1-3 watts in, 30w out	€75.00
Shure 444. Desk Mike	€69.00
Tokyo Hi-Power HL-700B. 600w PEP Solid state amp 0-30MHz.....	€1,099.00
Vectronics VDLP-300. As new ATU/Dummy load. Boxed, mint	€75.00
Yaesu DMU-2000. Data management unit for FT2000 etc Boxed. As new.....	€899.00
Yaesu FT-1900. 2m 50w mobile	€109.00
Yaesu FT-2000D. 200w Top class Transceiver, As new condition ...	€2,499.00
Yaesu FT-2800. 50 watt, 2m mobile	€29.00
Yaesu FC-902. 500w Manual ATU. Mint Condition	€249.00
Yaesu FT-51R Dual band handheld with drop in charger	€75.00
Yaesu FT-817ND. As new with extras	€499.00
Yaesu FT-817ND. HF to 70cms, All mode portable	€439.00
Yaesu FT847 Earth Station. HF+6+2+70cms Satellite ready . Boxed as new	€999.00
Yaesu FC-20 Matching Auto ATU for FT847. Mint Condition.....	€249.00
Yaesu FT-857D. HF/6m/2m/70cm Mobile. Boxed, as new	€675.00
Yaesu FT-897. HF-70cms. Boxed, As new	€699.00
Yaesu FT-900AT + filters. Classic HF Rig with Auto ATU	€799.00
Yaesu VR-5000. All Mode Receiver. 0-2.6GHz	€475.00
Yaesu VX-170. 2m handheld + charger.....	€79.00
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